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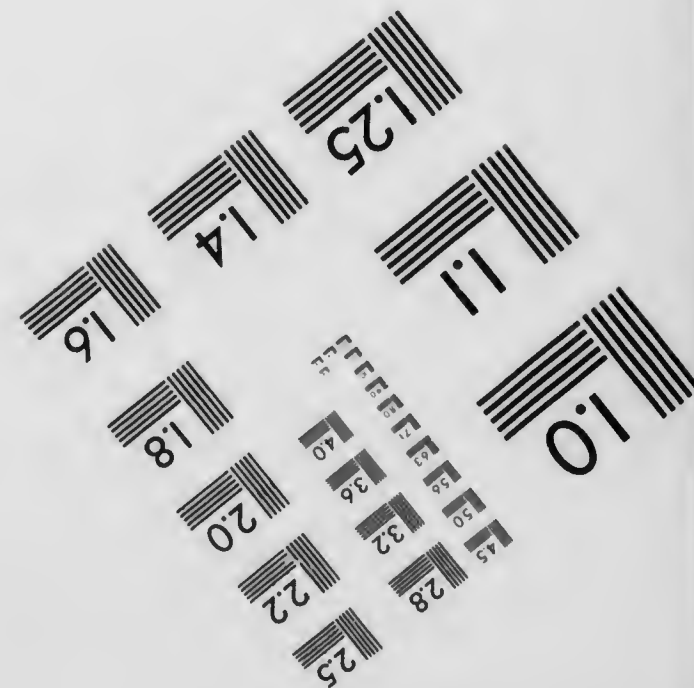
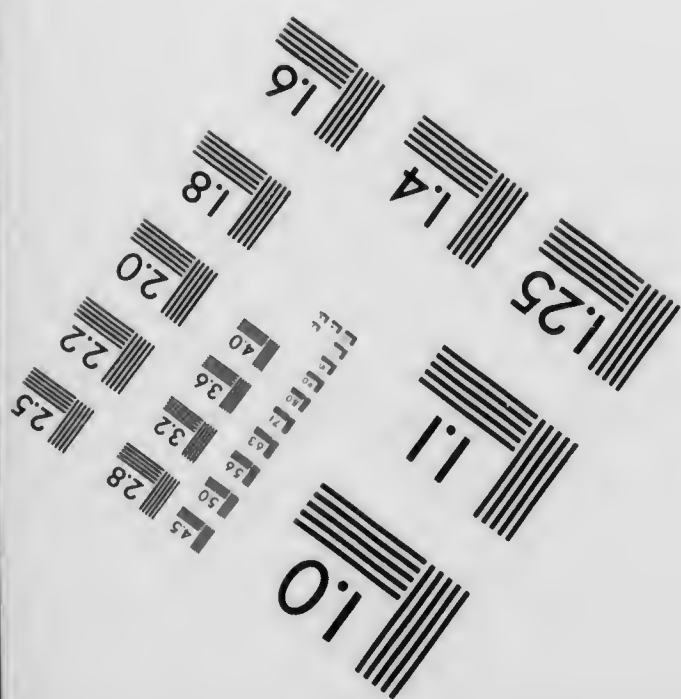
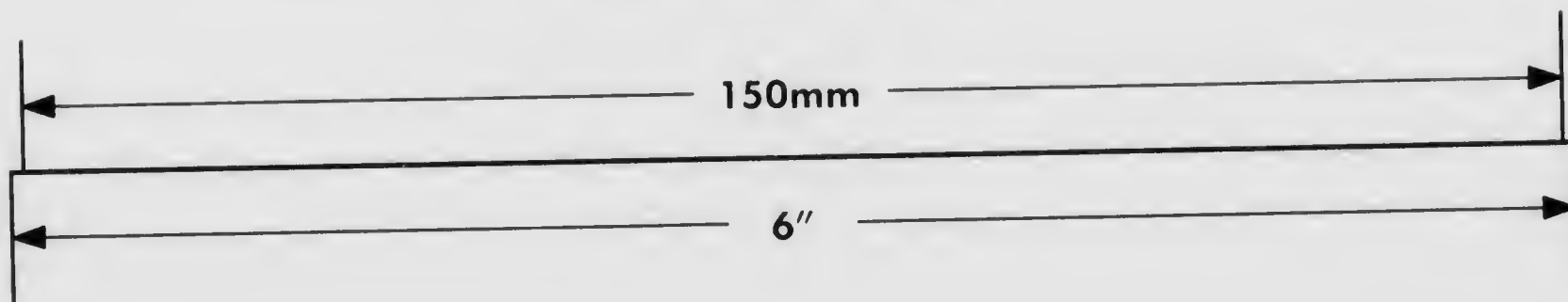
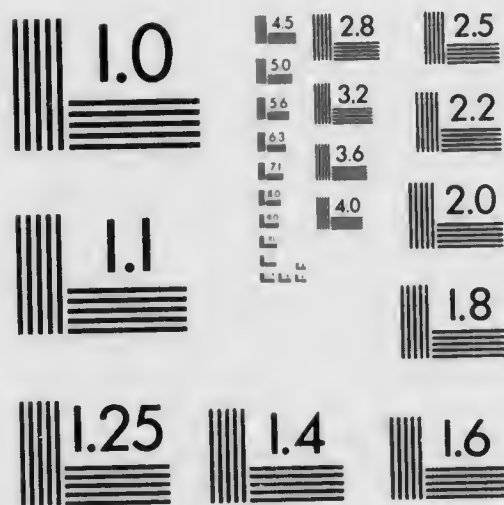
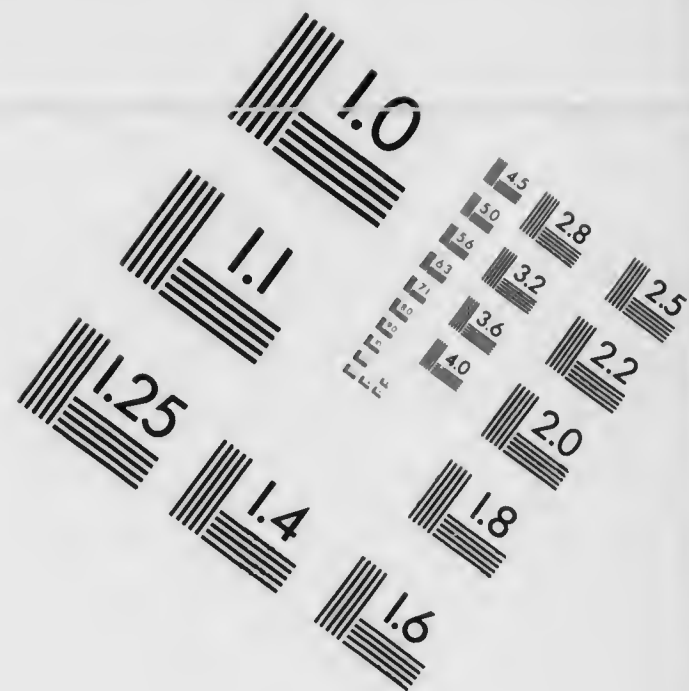
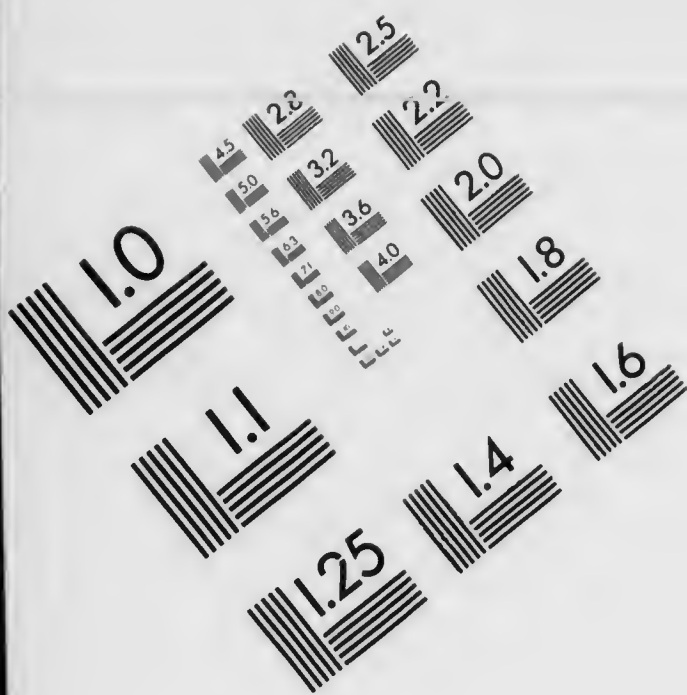
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Volume 1
1920/1921

INTER-STATE Milk Producers Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE INTER-STATE MILK PRODUCERS ASSOCIATION, Inc.

VOLUME **VI**

WEST CHESTER, PENNSYLVANIA, MAY, 1920

NUMBER **XXI**

APRIL MILK MARKET

Philadelphia Situation Shows Little Change

Conditions in this district have been unchanged, as far as surface indications would show. At times there was an undercurrent of uneasiness and some few problems arose, all of which, however, were satisfactorily adjusted.

The matter of leading interest, early in the month, was the stagnant condition of the condensed milk market. For some time manufacturers of condensed products experienced trouble in the export market. While there was an active demand, business was at a standstill owing to the impossibility to make satisfactory financial arrangements under the then existing condition of foreign exchange and credits. Large stocks had accumulated and some condenseries, having an uncertain market as well as price situation staring them in the face, were hard pushed to pay current prices for milk.

In some territories the condition became so acute that condensing plants were closed temporarily or their product turned all on butter. Some operated on a lower price basis, under agreements with the local dairymen. These conditions were more pronounced in the New York territory, but they had their temporary influence on this market. In a few scattered instances, largely in the outlying parts of this district, some price deflections were noted but they had little bearing on the general situation. Efforts, however, were made to obtain some concessions but matters were satisfactorily arranged and prices remained strong. At one or two points unsatisfactory arrangements regarding prices are still in process of adjustment.

During the latter half of April the market for condensed milk products strengthened materially. Export business began moving more freely and at the end of the month this situation was again in satisfactory condition.

The so-called "outlaw strike," on the part of certain railway employees, which for a time had freight movements generally tied up and caused endless confusion in deliveries of farm and dairy necessities, as well as all commodities, did not have any appreciable effect on the transportation of milk in this market. While some rearrangement in the delivery points in the city, were necessary there was little real delay in the movement of milk at any time during the strike. We had offerings of milk supplies from nearby

territories, in case a shortage should develop, but there was no necessity to call upon them.

Surplus milk has gradually increased in volume during the month, but with the exception of the time of the Hebrew holiday, the supply has at no time been abnormal. Surplus during April averaged about 25 per cent. Prices of milk "on the platform" except during the holiday period noted, held relatively firm. At the same time, it must be remembered, conditions this spring have not been favorable to any great increase in milk

This favorable butter market increased the price paid for April surplus milk to the highest level so far this year. In the first half of the month surplus milk was paid for on the basis of \$3.38 per hundred as compared to \$3.14 per cwt. in March, while the average for the month was \$3.43 per cwt. as compared to \$3.19 in March. This was for 4 per cent. butter fat milk delivered at all receiving points. At some of the outlying stations the price paid for surplus milk reached a higher level than was paid for the basic quantity.



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production. There has been practically no pasture and dairy feeds have been high in price. In instances a decline in the quality of milk was to be noted. Some producers used little or no grain feed; cows have been shedding their winter coats and pasture is late, so that a slight decrease in butter fat and total solids in the milk, was noted, particularly where feeding had not been increased.

The butter market, which has been very firm almost throughout the month, has been generally higher than in March. During the period of the railway strike and in fact until a few days before the close of the month when western butter began to come in more freely, prices were high and strong. On April first, 92 score solid packed creamery butter was quoted at 67 1-2 cents, New York, and advanced steadily until the 22nd inst., when it reached 77 cents. As the movement of freight became easier and supplies generally became better the market reacted and after the 24th prices dropped sharply, closing at 66 cents at the end of the month,

The price for the basic quantity of milk shipped during May, remains at 9 cents a quart f. o. b., Philadelphia, based on 4 per cent. butter fat content. This is equal to \$3.61 per 100 pounds at receiving stations on the railroad, in the 50-mile zone, for the same grade of milk.

These figures are interesting when compared to prices obtained by producers in the other important markets in the east. The receiving station price agreed upon for May in the 200 mile zone in New York is \$2.55 for 3.0 per cent. milk, equal to \$2.95 per hundred for 4 per cent. milk. In Pittsburgh the agreed price at receiving stations at outlying points is \$2.90 per hundred for 3.5 per cent. milk, or \$3.15 for 4 per cent. The Baltimore price for May is 37 cents a gallon or 9 1-4 cents f. o. b., Baltimore, for the basic quantity and 31 cents per gallon, or 7 3-4 cents per quart for surplus milk. The surplus supply in the latter market in April was close to 30 per cent.

Taking these comparative figures as basis, it is quite evident that the

prices received in this market show a relatively higher average level than do prices in other principal milk markets in the east.

At this season of the year come the usual complaints from dealers and consumers—garlicky milk. We ask you to do all you can to overcome this objectionable feature in spring milk. Consumers, to a large extent refuse to use milk containing garlicky and other odors. It's up to the producer to supply milk free from odors if consumption is to be maintained and continued and increasing consumption has an important bearing on the price situation.

BALTIMORE MILK SITUATION

The supply of milk in the Baltimore district is about equal to the demand, with a slight surplus in sight as the spring approaches.

The price paid for direct shipped milk for April was 38 cents a gallon for 4 per cent. milk, f. o. b. Baltimore, with a differential of 6 cents per gallon for surplus, or the excess amount produced in the months of September, October, November and December.

New shippers start on a basis of 50 per cent. average and 50 per cent. surplus. This price also has a differential of one-half cent per gallon for each one-tenth of a per cent. butterfat, above and below 4 per cent.

The May price is 37 cents per gallon, for 4 per cent. butter fat, with the same differential in regard to surplus and butterfat.

Plans are practically completed to have a joint meeting of producers and consumers organization in the last week of May, to put on an extensive advertising campaign. Mr. Munn, president of the National Dairy Council, will address the meeting.

D. G. HARRY, President
Maryland State Dairymen's Assn.

MARYLAND AND VIRGINIA MILK PRODUCERS' ASSOCIATION

The Executive Committee of the Maryland and Virginia Milk Producers' Association announced recently that the price producers should receive during May, June, July and August should be 36 cents a gallon for 3.5 per cent. milk and 40 cents in September, with the same increase for butter fat as now exists, two-fifths of a cent for each additional tenth of a point. For 20 per cent. cream the committee recommends \$1.75 a gallon in May, June July and August and \$1.85 in September. These prices are for

(Continued on page 6)

INTER-STATE MILK PRODUCERS REVIEW

By HON. FREDERIK RASMUSSEN
Secretary of Agriculture
Harrisburg, Pa.

Congratulation and success with the Inter-State Milk Producers' Review! It is another advanced step by the Inter-State Milk Producers' Association which unquestionably will add to the further usefulness and efficiency of the organization.

For nine years from 1907 to 1916, it was my privilege to be in close touch with the milk situation in New England. The producers for a number of years had an association which had a very checkered career; that is, it lived by spells. In 1910 the milk situation had reached a point where the price offered for milk by the dealers in Boston was so low that it was impossible for the farmers to stay in the business, even if they were willing to forego interest on their investment and work for nothing.

The price of milk was decided entirely by the dealers on a six months' schedule. Not only that, but the farmers at times were told that unless they signed the new schedule of prices immediately, the milk might not be accepted at all.

Considering that at the time the milk companies in Boston rented the milk cars from the railroad company, furnished the ice and in many places provided loading stations, the farmers were entirely at the mercy of the dealers. There was a milk strike with its great economic losses to the farmers' dealers and the public.

Conditions have changed. Today there is a strong New England Milk Producers' Association. The special privileges in transportation afforded the dealers have been removed, and from what I have learned during the last four years the milk situation has been generally satisfactory to all concerned.

Having been familiar with the work of the Inter-State Milk Producers' Association since its beginning, I cannot help drawing a comparison. This organization has been highly successful since its beginning because the leaders have been conservative, earnest men, always willing to work with the cards on the table, and because the milk dealers in Philadelphia and elsewhere have met with them in the same open way, and because both parties have taken the public into their confidence.

Do not understand that there has been no difference of opinion, that there have been no arguments and that it has always been a case of "You first, my dear Gaston." No doubt there have been arguments, but arguments based on economic facts. There might even have been loud talking. Having never attended a meeting, I can't say. This, however, is a public fact, that all parties at all times have come to an agreement, that they have continued to work together; that there have been no milk strikes with their economic wastes; that there has been no public condemnation of anybody. Confidence has prevailed and each has respected the other's view.

Recent history of the milk situation throughout the country makes it clear

that milk producers' organizations are necessary, not only for the good of the individual dairy farmer, but for the public good; these organizations should be supported by all the dairy farmers in territories where milk is shipped, not because of the additional power which might be added to the organization through a larger membership, but because in many instances non-members benefit to the same extent as do members. It seems as if the fellow who receives the benefit without contributing is in the same class as the fellow who insists on riding up hill when everybody else gets off to push.

The real test of milk producers' organizations depends upon whether they are able to use wisely the power which they possess. Organizations can only be successful where the work they are doing does not conflict with economic conditions. This country, in fact the entire world, is in an unsettled condition. With the unsettled labor condition, the rush of labor from the country to the city, and with a larger and larger percentage of the people being drawn from essential production into non-essential production, it is hard to foretell what will happen from day to day. We know that something is bound to happen but we do not know when. There probably never was a time when careful deliberation and wise judgment were as necessary as they are today.

The Inter-State Milk Producers' Review is a timely publication. It will be the medium through which the ever-changing conditions can be brought before the members of the Association. It will add strength to the Association as the most vital factor in successful co-operation is a complete knowledge on the part of all as to what is going on. Given all the facts, the majority of dairymen can be trusted to do what is right.

The greatest difficulty which the dairy farmer is facing today is the farm labor shortage. Statistics compiled by the Pennsylvania Department of Agriculture show that 81,140 farms are without adequate labor. This is 28,510 more than reported a shortage of help last year at the same time. The price paid for milk does not warrant paying the wages of other industries. If this condition continues there can be but one result, a decrease in the number of dairy cows.

Lately a good deal has been said about an over-production of milk. There is no over-production, but a series of unfortunate circumstances brought about by the war have upset the foreign market. During the war many condenseries were started and farmers found a ready market for their milk at a price that made them a fair return on their labor and investment. These condenseries were engaged in filling orders, and with the ending of the war they depended upon decimated Europe to keep them in operation. Considering the decrease in European dairy herds, it was expected that the market for American

dairy products in Europe would have continued without interruption. However, the great drop in foreign exchange did not only decrease foreign purchases but induced several countries in Europe to become exporters of dairy products so as to gain advantage of the abnormal exchange rates.

What of the future? Some people say we have entered upon a new price level and that we are going to sail along with the present high prices of labor and commodities. Others say a financial depression is likely to come sooner or later. The fact is that economic and social conditions throughout the entire world are out of balance and it takes more than a wise man to foretell what is going to happen next.

It is discouraging to operate a dairy farm to-day and look into an uncertain fact. Remember that you are not the only one who is facing the uncertainty, that other branches in farming and other industries are in a similar position. If you have a farm where the economic and natural condition are more favorable to the dairy cow than any other type of farming, the cow should only be given up as a last resort. With a continual drawing of labor away from the farm and with its decrease in production, the price of food stuffs undoubtedly will advance and, although the farmers may have to work hard and long hours, for those who persevere there is prospect of financial reward.

INTERESTING ITEMS

From Secretary R. W. Balderston,
With the American Friends
Service Committee in
Germany

Several long letters have recently been received from Robert W. Balderston, secretary of the Inter-State Milk Producers' Association, now in Germany. Mr. Balderston was granted six months' leave of absence last December to assist with the work of the American Friends' Service Committee in feeding the under-nourished children in Germany, in co-operation with Herbert Hoover of the European Child Relief.

"Children have not had proper food for years and in consequence they are retarded in both mental and physical development as well as being subject to all kinds of diseases," Mr. Balderston writes.

"Milk is a very scarce article. Its use is restricted to invalids, and very small children. Adults generally have not had any since the war began six years ago, and we find children who do not know what milk tastes like. There is little chance of increasing the production of milk, for the cows get little to eat except straw and some roots, but conditions may be better when spring pastures return.

"The plan of child feeding is the same that Mr. Hoover has used successfully in other countries. A meal is fed once a day, six days in the week, in schools, kindergartens, and day nurseries. In special cases only, can food be taken home and then under the control of the nurse or relief work-

er, to see that the child actually eats it and not an adult. All children are fed the same regardless of age. Our supplies consist of peas, beans, lard or a substitute fat, sugar, cocoa, flour and condensed or evaporated milk.

The German committees furnish all the actual workers and overseers, but we retain title to the food until it is actually consumed. We have record of it till it reaches the child's mouth. I am just now starting out (March 20) to organize a new district of 18 cities in the Ruhr district."

The recent revolution in Germany he describes as paralyzing industry like a blizzard or a flood. Earthworks were thrown up in the streets of Berlin, and machine guns were used freely, close to the hotel where the American mission was staying, but the members were not disturbed, and where organization was complete, the child feeding continued as usual.

He describes the hotel life in Germany as very similar to that in the States. "But living conditions in the homes is very different. The government does not allow any one to have a large house or a 10-room apartment, without taking boarders. Staple foods can be produced only by card and in limited amounts, and the quantity is scarcely enough for one to live on, while extras are prohibitive in price. Hot water for bathing is a serious matter, as well as heat, but this will probably disappear towards spring as the fuel situation will not be so desperate. In general the meals are good but I do not see how they do it without good meat, good flour, good butter or lard, and without any milk or cream. In the market places the meat seen is chiefly hares and chickens; turnips are much in evidence with some onions, parsley and beets."

"I could tell many sad tales of misery but they can be duplicated in any country. It is the sum total of under-nourishment and the average condition of the children and the lack of ability on part of the local authorities to cope with the problem, that impresses one most and makes our mission seem most important just at this time. The food control here in Germany is so good that the next harvest should make a wonderful improvement in conditions, if the nation gets to work now. But conditions cannot become normal for some time to come. The situation has so many sides to it and the internal and external complications are so great that the children of Germany do not have a very happy and encouraging future."

NEW JERSEY

TOMATO CONFERENCE

A conference of tomato growers and canners in Cumberland county was held last month in Bridgeton, N. J., when the whole situation was discussed at length. It was agreed that the industry should be maintained and that higher yields per acre were necessary to compete satisfactorily with the Middle West. The canners showed that their position was an uncertain one but that recent developments were more promising. It was unanimously voted that \$25 a ton represented the opinion of the conference for a just and fair price this year.

MEETINGS OF LOCALS

The Pennington, New Jersey, Local, of which Fernando Blackwell is president, recently held a meeting at which Mr. P. B. Bennitch, of the New Jersey State Department of Agriculture, was the principal speaker. In his remarks he laid particular stress on betterments and improvements in dairying. The boarder cow was one of the chief elements of high cost of production and should be eliminated. In 1914 he said the increase in number of cows was at a higher rate than that of population—while in 1918 population was increasing faster than the increase of milk cows. People in the country use little milk per capita. In some foreign populated sections the use of milk is extremely small, particularly among children—in instances 50 per cent. of the children receive no milk at all.

At a retail price of 15 cents a quart, Mr. Bennitch said, milk was the cheapest food obtainable, as compared to the present high costs of other food products. In some sections oleomargarine was being used extensively in place of butter. This was not only detrimental to the dairy industry, but the comparative value with butter—as a food was deficient. He emphatically urged the use of butter in place of oleomargarine or other butter substitutes.

Mr. George Vaughn, of the Mercer County Cow Testing Association, spoke briefly on testing association work. Through the efforts of this association, he said, about 10 per cent. of the boarder cows in the association membership, would be eliminated this spring, thus lowering the cost of production.

Frederick Shangle, treasurer of the Inter-State Milk Producers Association, explained in detail the new basic and surplus plan of selling milk which is largely effective in this district and which, after being understood by milk producers, has proven generally acceptable.

Following adjournment of the meeting, at which there was a good attendance, refreshments were served.

On the evening of March 25th, a new local with twelve members was formed at Straoustown, Berks county. Dairying is increasing in this district and farmers are rapidly affiliating with our organization.

NATIONAL DAIRY ASSOCIATION 1920 SHOW

It is not a far cry to October 7th, when the National Dairy Show for 1920, will open its educational and hospitable doors to the dairy world and the consuming public.

This year it has increased its exhibit space by 15,000 square feet over all previous space, and is now sold out. Increased space for stabling capacity will be provided.

Exhibits this year will surpass all others. Grade cows under Cow Testing Association rules and regulations will be exhibited this year. The government exhibit will occupy twice the space of 1919.

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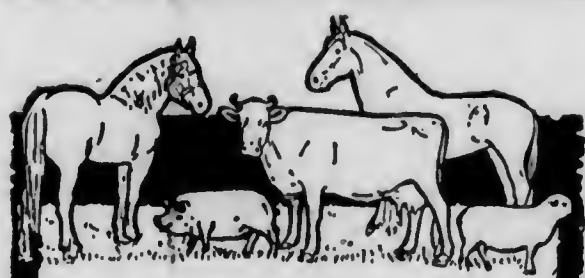
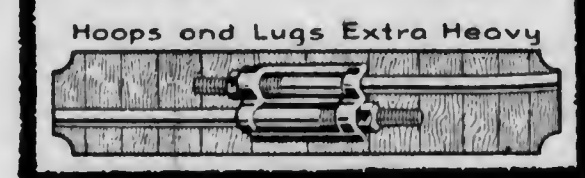
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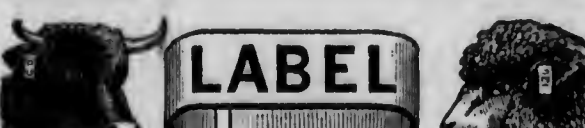
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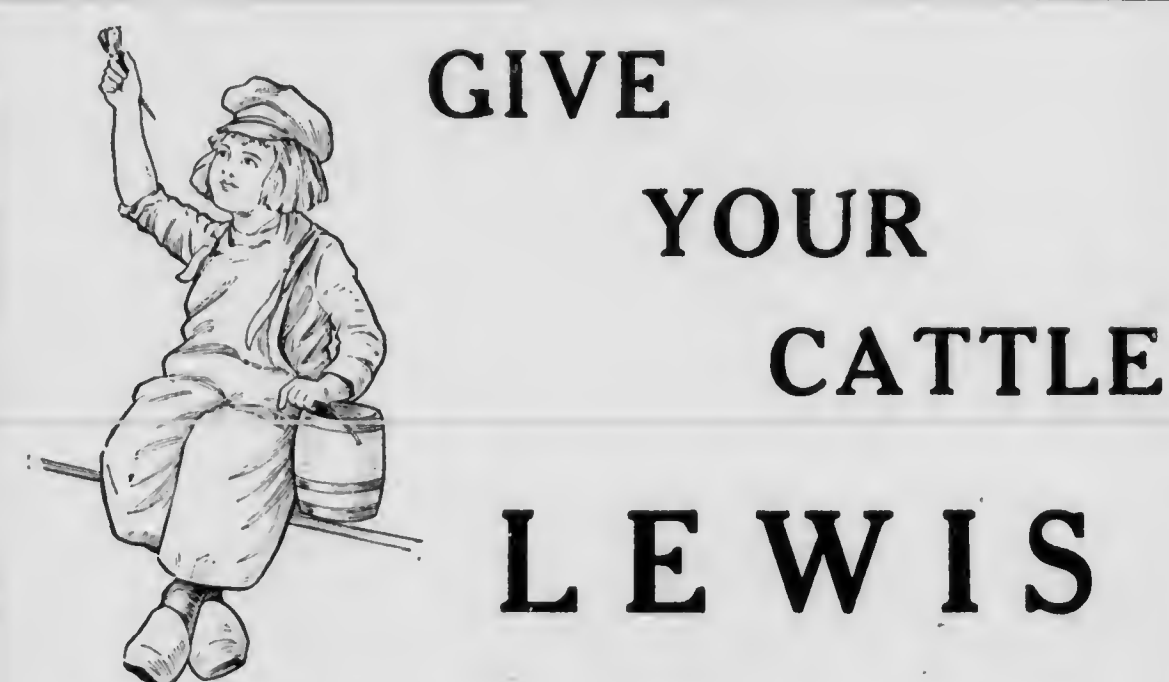
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Editorial

With this issue we come before our readers, not only in a new and very much larger form, but also under a new title—The Inter-State Milk Producers' Review.

For over a year we have been sending to our members, each month, a news letter. This was limited in size and was costly. It gave us but small opportunity to bring matters of interest before our members in anything but a brief manner.

In bringing out this issue of the Inter-State Milk Producers' Review we feel that we should take the opportunity to announce for the benefit of all our readers, what might be termed our declaration of principles.

We shall stand broadly for a clean paper, both from an editorial and advertising standpoint. Our chief effort will be to give to our members, each month, news of the work of the Association in general. The educational value of this information should prove of exceptional interest to our readers. It should broaden their views and strengthen the Association, in that the members have a better knowledge of its work and benefits.

Conditions in the milk market will be reviewed at length and the information given will be authentic and show the situation from month to month. By this means the producer will be able to keep in close touch with the situation, a feature that has been impossible heretofore. Price fluctuations, from necessity, were taken by the dairy farmer, on faith. Now, with the information as to the situation in general available, a clear understanding may be had.

We will endeavor to give, briefly, conditions in other leading milk producing districts, so that a better idea as to the situations of the industry at large may be obtained. When available we shall under Market Prices, give detailed milk prices, not only of this but other markets. Butter, eggs, grain and other farm products, as may become advisable, will also be quoted.

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From the advertising standpoint, we shall print only that class of matter, which, to the best of our knowledge,

is fully trustworthy. No advertisements of a questionable character will be accepted. We want you to read the advertisements as well as the general reading matter—new tools, equipment, money and labor-saving appliances, frequently first come to a reader's notice through the advertising columns. We want the use of advertising space to prove a profitable investment to those who pay for it, and you—each one of you—can help. Always, in writing to an advertiser, mention in your letter that you saw the advertisement in The Inter-State Milk Producers' Review; he likes to know that you read his ad.—and so do we.

Finally, The Inter-State Milk Producers' Review is our own paper; your commission in part, together with funds obtained from advertisements, pays for its publication; so support it in every way you can. If there is any policy or statement that does not meet your approval, write the editor. If you like it, write him anyway; it makes not only him, but all the officers of your Association feel that their work in your interest is appreciated. If you have a timely article of interest to the dairy farmer generally or news of local interest, send it to the editor—and now, with your assistance, watch us grow.

F. P. WILLITS.

There is a movement under way on the part of some of the small dealers to better their milk supply. Doing business in a competitive market, they must maintain the standard of their merchandise—milk—on a quality basis equal to their competitor, or lose the business. To bring milk that is under grade, partly skimmed, carelessly produced or otherwise defective up to the standard is costly, and it must be done, to a large extent, at the expense of the producer of the better grade milk. It's up to the dairy farmer, producing low grade milk to improve his herd condition. No one can turn out a good job with poor tools, neither can the dairy farmer produce good milk with poor cows. The Inter-State Milk Producers' Association stands for good, clean milk and will further every effort towards its production.

We believe in calling a spade a spade. If you have a low testing cow, or an inconsistent milker in your herd, it's economy to get rid of her. It costs just as much to feed and care for a poor cow as it would to feed and care for a good one, and for breeding purposes, the poor cow is no good—even for veal calves.

Look into your herds; do it now—and, do it. Haven't you often heard a dairy farmer say, "My herd is not what it ought to be" and then go right along under the same conditions, year after year? Anything that will stand on four legs, milk out of two, three or four teats and produce any kind of milk won't do. Don't think of milk in the light of quantity alone; a cow may give a good volume of milk, but the butterfat yield be so low that the milk may be of little value. The dairy farmer must get down to a business basis—the sooner the better. Weed out the low producer; raise your

standard, and profits will show that the move was in the right direction.

As a policy we are not interested in the political situation, except in so far as it affects the farmer. It might be well, however, to call the farmers' attention to the necessity of investigating the standing of the presidential timber as to their respective views regarding policies toward farm interests. Several of the leading candidates have already expressed themselves favorably in replying to the questionnaire sent out by the National Board of Farm Organizations, favoring collective bargaining as well as other important legislation. These matters will bear close scrutiny. If the candidate is not favorable to legislation for the betterment of conditions under which the farmer has been long suffering, would it be to your interest to support his candidacy? Think it over.

NOTES

Guy Smith, Director State Bureau of Markets, Harrisburg, Pa., has resigned to enter business. His successor has not yet been appointed.

Clean up weeks are popular at this time in towns and cities. Why not have a clean up week on the farm? Set the first rainy day aside to clean up the barn, stable or granary. Clean up around the buildings before the weeds get a start and hide some tool or machinery part wanted later on.

Mercer county led the State in the number of cattle tested for tuberculosis during 1919. The Bureau of Animal Industry, Pennsylvania Department of Agriculture, tested 2,753 cattle in this county during the year and only 53 were found to be reactors.

Forty-five of the leading dairymen in Beaver county have notified the Bureau of Animal Industry, Pennsylvania Department of Agriculture, that they wish to accept the accredited herd plan for the eradication of tuberculosis from their dairy herds.

Grow a gourd vine or so and get your drinking dippers for nothing. The good wife may also obtain her "darners" from the same source.

ACTION OVERRULED

It is reported that the United States District Court, in Detroit, Michigan, has granted a temporary injunction to Detroit milk dealers, restraining the Federal Fair Price Committee from fixing prices of milk. The Committee had ordered a two-cent reduction in milk prices. The dispute will probably be carried to a higher court.

A—I thought Jim married a woman worth a million in her own right?

B—So he did; but he hasn't been able to get his right on any of it, and so he's left.—Ex.

Little Harry—I want to get a bale of hay.

Shopman—What do you want with it? Is it for your father?

Little Harry—No, sir. It's for our horse.—Ex.

ORGANIZATION AMONG DAIRYMEN UNDERTAKEN

The Pennsylvania Dairy Council was tentatively organized at a meeting of 65 representative milk producers and dealers, held in Harrisburg, recently. The object of the organization, which is to include all persons connected in any way with the dairy industry, is to conduct an educational campaign that the importance of the food value of milk and the relationship of the dairy industry to our national life be better understood.

The Pennsylvania Council is to be closely associated with the National Dairy Council. Mr. M. D. Munn, president of the National Dairy Council, attended the meeting in Harrisburg and outlined the plan for a national advertising campaign which will carry the message of the dairyman and what he represents to every section of the United States. Secretary of Agriculture Fred. Rasmussen also addressed the dairymen.

The Pennsylvania organization will be called upon to raise a fund of \$50,000 which will be used to carry on an educational campaign throughout the State and as a part of the fund which will be used in a national campaign.

Plans are under way for the formation of similar organizations in other States not already organized.

The temporary officers selected were: President, Charles F. Jenkins, editor of the "Farm Journal," Philadelphia; secretary, D. E. Andrews, Chester county; executive council, C. J. Smith, Seeleyville; C. R. Lindbach, Philadelphia; J. F. Garber, Lancaster; Ed. Bailey, Pittsburgh; M. T. Phillips, Pomeroy; G. C. Webber, York; E. E. Wheeler, Waterford, and John Bell, Jr., Coraopolis.

MT. BETHEL COW TESTING ASSOCIATION, NORTHAMPTON COUNTY, PA.

During the month beginning with March 24, 266 cows from 24 herds were tested. The highest cow for the month is owned by George Good, Bangor, Pa., a registered Holstein which produced 62.2 pounds of butterfat and 1,553 pounds of milk.

The following men have cows on the honor roll producing over 1,000 pounds of milk or 40 pounds of butterfat per month: Bert Ackerman, 2; J. J. Hartung, 4; Henry McEwen, 4; E. D. Miller, 1; Dayton Fox, 3; Luther Miller, 4; George Good, 8; Lewis Reagle, 4; Enoch Reimer, 1; John Shoemaker, 1; Luther Dietrich, 3, and Lyman Kern, 1.

The honor list included three registered Holsteins and thirty-three grades. All but five are Holsteins.

JOHN I. GABLE, Tester.

LOW TESTS

This is the season of the year when the butter fat content of milk usually drops, particularly when cows are not fed carefully. Early in the spring cows shed their hair and unless carefully fed or sudden changes in feeding are made a low test is likely.

LATEST MARKET PRICES

PHILADELPHIA MILK PRICES
MAY, 1920
Subject to change whenever warranted by market conditions

Test	Price	Quantity	Price	Price for all
Per cent.	per 100 lbs.	per quart	per 100 lbs.	the Basic
3.1	\$3.74	8.1	7.7	
3.2	3.78	8.2	7.8	
3.3	3.82	8.3	7.9	
3.4	3.86	8.4	8.0	
3.5	3.90	8.5	8.1	
3.6	3.94	8.6	8.2	
3.7	3.98	8.65	8.25	
3.8	4.02	8.7	8.3	
3.9	4.06	8.8	8.4	
4.0	4.10	8.9	8.5	
4.1	4.14	9.0	8.6	
4.2	4.18	9.1	8.7	
4.3	4.22	9.2	8.8	
4.4	4.26	9.3	8.9	
4.5	4.30	9.35	8.95	
4.6	4.34	9.4	9.0	
4.7	4.38	9.5	9.1	
4.8	4.42	9.6	9.2	
4.9	4.46	9.7	9.3	
5.0	4.50	9.8	9.4	
5.1	4.54	9.9	9.5	

When milk is not tested the price f. o. b. Philadelphia is 9 cents per quart.

RECEIVING STATION PRICES
Less freight and Receiving Station charges

Miles	Test	Price	Price for all
1 to 10 incl.	%	per 100 lbs.	the Basic
11 to 20	3.1	3.27	3.07
21 to 30	3.2	3.26	3.11
31 to 40	3.3	3.24	3.15
41 to 50	3.4	3.23	3.19
51 to 60	3.5	3.21	3.23
61 to 70	3.6	3.20	3.27
71 to 80	3.7	3.19	3.31
81 to 90	3.8	3.18	3.35
91 to 100	3.9	3.17	3.39
101 to 110	4.0	3.16	3.43
111 to 120	4.1	3.15	3.47
121 to 130	4.2	3.14	3.51
131 to 140	4.3	3.13	3.55
141 to 150	4.4	3.12	3.59
151 to 160	4.5	3.11	3.63
161 to 170	4.6	3.10	3.67
171 to 180	4.7	3.09	3.71
181 to 190	4.8	3.09	3.75
191 to 200	4.9	3.08	3.79
201 to 210	5.0	3.07	3.83

Freight rates deducted on a basis of 46 quarts—113 per cent. of 40 quarts, plus 3 per cent. war tax.

Prices for milk above basic quantity based on 120 per cent. of the average monthly or semi-monthly price of solid packed 92 score creamery butter, New York City, in May, June and July an increase of 10 per cent. in and August an increase of 5 per cent. in the basic quantity of milk shipped is allowed.

Month	First half	Second half	Average
January	\$3.16	\$3.12	\$3.14
February	3.20	3.18	3.19
March	3.14	3.19	3.16
April	3.38	3.43	3.40

MAY COMPARATIVE PRICES PAID

Location	Basic	Surplus
Philadelphia, 50 mile zone	\$4.61	3.43
New York, 200 mile zone	2.95	
Pittsburgh, outlying points	3.15	
Chicago, country plants	2.70	
Baltimore, per gallon f. o. b.	3.37	.31

RETAIL MILK PRICES

Location	Quarts	Pints
Philadelphia	15	8
New York	15	8
Pittsburgh	15	8
Baltimore	16	9

APRIL BUTTER PRICES

Location	92 score solid packed creamery butter, cents per pound
Phila.	67 1/2
New York	67
Chicago	62 1/2
1	67 1/2
2	67
3	67 1/2
4	68
5	66
6	68
7	68
8	69 1/2
9	71 1/2
10	73
11	75
12	74 1/2
13	75
14	75
15	75
16	74
17	73
18	73
19	73
20	73 1/2
21	74 1/2
22	76
23	76
24	76
25	72 1/2
26	73
27	70
28	67
29	67
30	65

PRICES PAID PRODUCERS

Location	Producers	Retail
Quarts	cents	pints
And retail selling prices, Market Milk, nearby cities and towns		
Producers	cents	pints
Quarts	cents	pints
Allentown, Pa.	8 1/2	14
Bethlehem, Pa.	8 1/2	14



ART BUTTERBRODT

A Perfection Enthusiast! Art Butterbrodt Converted!

"FOUR years ago", says Mr. Butterbrodt in telling how he became an enthusiastic user of a Perfection Milker. "I bought the second Perfection Milker sold in this vicinity. At that time this milker was generally unknown in this locality, while today it is generally recognized as the best machine on the market. I bought a Perfection when I was not wholly convinced of the practicability of any milker, but now I wouldn't part with it."

Cows Teats and Udders In Perfect Condition

"When my cows went dry I even feared that some bad effects would be revealed after freshening. However, I was surprised to find that after freshening my cows milked more evenly on all four quarters than they ever did when milked by hand."

"A year ago I milked my cows three times a day with the machine for a period of six months. At the end of this period the cows' teats and udders were in as perfect condition as ever."

The Best Hired Man

"The milker was just as willing to work three times a day as twice. It never kicked and has never refused to work when I wanted to use it since the day it was installed in my barn. At the end of four years continuous use I am free to state that I find milking with the Perfection more satisfactory than hand milking. And the Perfection makes it easier to secure hired help and to keep the help in good humor."

It's Time For You To Investigate

Thousands of dairymen are putting in the Perfection Milker every year. It's the answer to the labor problem. Investigate for yourself. We'll gladly send you names and addresses of Perfection owners, together with a free copy of "What the Dairyman Wants to Know" the book that answers every question about milking machines. Today is the day to write.

Perfection Manufacturing Company

2168 E. Hennepin Avenue

Minneapolis, Minn.

The Perfection is the Milker with the Downward Squeeze Like the Calf

PERFECTION MILKER

LINGOHOCKEN BERKSHIRES

PROLIFIC LARGE SMOOTH
rich in the blood of the best
Special Attention given to orders for Spring Pigs

Write for information

LINGOHOCKEN FARMS

Pineville, Bucks Co., Penna.

Camden, N. J.	9	14	8
Harrisburg, Pa.	8	13	7
Lancaster, Pa.	7 4/5	12	7
Norristown, Pa.	8 1/2	13	
Princeton, N. J.	8 1/2		
Pottsville, Pa.	9	14	
Reading, Pa.	8 1/3	13	
Trenton, N. J.	9	14	
Wilmington, Del.	8 1/2	14	
York, Pa.	8	13	

MENTION THE MILK PRODUCERS

IF YOU HAVE NOT SENT US YOUR SUBSCRIPTION BLANK

SIGN THIS—TEAR OUT AND MAIL AT ONCE

INTER-STATE Milk Producers Review

Inter-State Milk Producers Assn., Inc., Publishers
720-722 Heed Bldg., Philadelphia, Pa.

I hereby subscribe to the Inter-State Milk Producers Review, at the rate of 50 cents per year, in advance.

Signature.....

P. O. Address.....

Date.....

Member..... Local

WHEN WRITING ADVERTISERS



**SPRING
PASTURE
IS ALL
RIGHT
BUT—**

Don't Stop Feeding

your cows grain when you turn them on to pasture. The United States Government Bulletin No. 743 says:

"The bulky nature of pasture grass places a positive limit upon the capacity of the cow to take feed. In other words, the cow's stomach cannot hold grass enough to supply the required nutrients for maximum milk production, therefore a part of her ration should be of a more concentrated nature."

Because of this fact it will pay you well to feed

SCHUMACHER FEED AND BIG "Q" DAIRY RATION

GENEROUSLY, even when the cows are on abundant pasture. These two ideal feeds being composed of linseed meal and a variety of selected by-products of grains, corn, oats, wheat and barley, furnish the proper concentrated nutrients for bodily maintenance and health conditions—both of which are necessary for maximum milk production. Schumacher furnishes the proper carbohydrates and Big "Q" the right proteins.

Schumacher and Big "Q" being ready to feed, insures ACCURACY of the ration and SAVES the labor and uncertainty of home mixing. With Schumacher and Big "Q" you have a combination with which you can meet the individual requirements of every cow in your herd. That's why more Schumacher is fed to dairy cows than all other feeds in the world combined—that's why 36 World Champion Cows have been helped to make their world's records with these feeds—that's why you will find it the most profitable feed for YOUR cows. Your dealer can supply you. If not, write

The Quaker Oats Company

Address Chicago, U. S. A.

THE CUMBERLAND COUNTY HOLSTEIN-FRESIAN BREEDERS ASSOCIATION

WILL HOLD ITS

THIRD ANNUAL SALE

AT THE OLD FAIR GROUNDS

Carlisle, Pennsylvania

MAY 25th, 1920

80 HEAD OF THE BEST CATTLE
OF THE BREED WILL BE SOLD

FOR CATALOG AND INFORMATION, ADDRESS

R. L. SHENK - NEWVILLE, PA.

GOOD CATTLE WILL MAKE YOU MONEY
WHEN OTHERS LOOSE IT

MENTION THE MILK PRODUCERS



**NOW
Is The Time
To Paint Wagons,
Buildings, Implements, Etc.**

A coat of good paint NOW will add materially in conditioning them to give best service during the coming busy season.

With current high prices of building materials, implements and farm machinery of all kinds it behooves every farmer to paint now and then—and to use good paint.

NICE Paints

are good paints. They have been known and used by farmers for 40 years. Their hard wearing qualities have made them famous. They are ready mixed, making their use a simple matter. Ask your dealer or write us.

We have a practical booklet called "Paint Pointers" which we will send you free. It contains honest advice pertaining to every sort of paint job. Send for a copy.

Eugene E. Nice - Philadelphia

Maryland and Virginia Milk Producers Association

(Continued from page 1)

milk and cream delivered in Washington, D. C.

At a general meeting of the Maryland and Virginia Milk Producers, recently held, plans for a reorganization were discussed and adopted. It is proposed to have the organization act as agent for the sale of all the milk of its members. The new plan and complete reorganization of the Association is expected to be effective by October 1, 1920.

The Executive Committee announces that Mr. T. E. McLaughlin, of the Maryland State College of Agriculture, has been secured as manager and secretary and will take charge of the organization work. Mr. McLaughlin had a prominent part in perfecting the organization of the Maryland State Dairymen's Association and is a practical dairyman.

Read the advertisements—keep posted on money saving propositions.

WHEN WRITING ADVERTISERS

POULTRY ITEMS

"AS LARGE AS AN EGG"
DOES NOT MEAN MUCH

The eggs of different kinds of domestic poultry vary in size as well as appearance, and there is also a considerable range in the size of eggs of different breeds. Hens' eggs range from the small ones laid by bantams to the large ones laid by such breeds as Light Brahmas. On an average, hens' eggs are 2.27 inches in length and 1.72 inches in diameter, or width, at the broadest point, and they weigh about 2 ounces each, or 8 eggs to the pound (1.5 pounds a dozen). Eggs of pullets are usually smaller than those of old birds, those of guinea fowls about two-thirds the size of hens' eggs, those of ducks somewhat larger, while those of turkeys and geese are considerably larger.

Mrs. Casey—"An' phwat are yez doin' wid that income tax paper, Casey?" Casey—"O'im thryin' to figger out how much money Oi save by not havin' any."

Cow Testing Associations

There is no disputing the fact that the Cow Testing Association is of unestimable benefit for the dairy farmer. In these days of high costs of production no more certain method of obtaining authentic information regarding the value, as a producer, of each cow in the herd is to be had. Milk production is rapidly developing into a systematic business, rather than a rule of thumb, go as you please proposition.

Producers not showing a profit should be eliminated. The sooner the better. In many cases this transition is not the easiest problem—but make a beginning. Get into the cow testing association, improve your herd, weed out the boarder cow, away with the grade bull, and broaden out to the accredited herd system.

Now all this, you say takes time and money. True—but a move in that direction should be made. It is not absolutely necessary nor advisable from a financial standpoint to do all these things at once, but get started and the cow testing association is a move in the right direction. It will tell you where you stand at least and you can plan your betterment methods afterwards.

The Southern Blair County, Pennsylvania, Cow Testing Association was started about two years ago and the information obtained through its work is aptly illustrated in a report received by Mr. R. I. Tussey, Hollidaysburg, Pa., parts of which we quote:

"We find some splendid cows in the association and note a gratifying increase in production since the association was started.

"The average cost of producing milk per cwt. was \$3.87 or .072 per quart; the average production per cow was 7,354 pounds of milk.

"Your average production per cow was 9,901 pounds, at a cost of \$2.59 per cwt. You are to be congratulated, both on the average production and cost of production, these figures being much lower than the average for the association. It will be interesting to compare these records with those of another year, to see if the high standard can be maintained or increased. Feeding records show that you used good feed with good judgment. You have probably noted that Spot, Whitey, Betz and Pauline are your lowest cows. In fact it is doubtful if these four cows made you any money."

Mr. Tussey has a herd of Holstein cattle whose average test showed 4.2 per cent. of butter fat during 1919. His herd sire has a record of two 32 pound daughters and his dam was a 30 pound cow.

It will pay you to read this story over again and ponder—how much can I improve my own herd and my financial position by the same methods—get in touch with the cow testing association in your neighborhood and stop the leaks.

For Sale One High Guernsey Bull Calf

Grade

\$50 If Taken at Once

S. C. Buff Leghorn and Barred Rock Hatching Eggs, \$2.50 for 15. Delivered Parcel Post

Orders Booked

Registered Chester White pigs

JOHN C. SUTTON Blacks, Md.



Results

Just as you cannot tell whether or not tested seed corn is worth while until you have tried it and compared results, so you cannot realize the actual economy of Unicorn till you have measured the increase in milk produced.



UNICORN DAIRY RATION

BUY REGISTERED HOLSTEINS

I will sell 13 head at the Cumberland County, Holstein-Fresian Breeders Sale

Carlisle, Penna., May 25th

They are bred by or bred to **Lothian De Kol Korndyke**

Whose Two Nearest Dams are Heifers Average
23264 Lbs. Milk, 1003 Lbs. Butter in One Year

Breed the Long Distance Kind, that Stay Fresh the Year Round and Avoid Surplus

I. V. OTTO Route 6 **Carlisle, Penna.**

WILLIAM S. KER Carlisle, Pa.

Will consign to the Cumberland Co. Holstein Breeders Sale, May 25, 1920, at the Carlisle Fairgrounds

A 20 lb., 2 yr. old daughter of a 22.5 lb. cow, and her sire is a 22 lb. son of Woodcrest Ina, Pietje. A daughter of Korndyke Butter Boy, with a 23.55 lbs. of butter from 588 lbs. of milk; also a 17 lb., 2 yr. old granddaughter of King of the Pontiacs, her dam is a granddaughter of Paul Beets De Kol and Sir Clyde, and a daughter of the Bull that headed Heiger's show herd last fall.

Am also offering at PRIVATE SALE a SPECIAL bargain

A SON OF KING LYONS 3rd, FROM A DAUGHTER OF SEGIS LYONS

He was born April 22, 1920, is nearly white and as straight as a line. The first check for \$100 takes him, F. O. B. cars here. You will need to mail that check at once if you need him

HE WILL NOT LAST LONG AT THAT PRICE

MENTION THE MILK PRODUCERS REVIEW

WHEN WRITING ADVERTISERS



Cultivates and Fertilizes at the Same Time!

THE new Fertilizer Attachment for Iron Age Riding Cultivators saves distributing all the fertilizer before the crop is planted, and avoids all other side-dressing operations.

Ordinary methods that put a large amount of fertilizer where it is not available to the plants, where it blows away or gets washed out, are avoided. The design is similar to that used with perfect success for many years on the Iron Age Potato Planter.

Crop Gets a Boost When Most Needed

With this attachment, a quick-acting fertilizer can be thoroughly mixed with the moist soil when the crop is cultivated. With high-priced fertilizers this is especially desirable as smaller quantities are required, and there is less likelihood of leaching from heavy rains. Masses of fertilizer are not permitted to form and there will be no layers of fertilizer under the plants which cannot be stirred up to make available plant food.

By the use of this new attachment and a pair of discs, the Cultivator becomes a practical Row Maker, making up and fertilizing rows for plants such as strawberries, cabbage, peppers, tomatoes, etc. Capacity, 80 lbs. The feed sprouts are adjustable and can be regulated to suit width of rows.

Write for prices and information

Bateman M'f'g Company

Box 88D

Grenloch, New Jersey

IRON AGE

RIDING CULTIVATORS

MENTION THE MILK PRODUCERS

NEW WHEN WRITING ADVERTISERS

INTER-STATE Milk Producers Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE INTER-STATE MILK PRODUCERS ASSOCIATION, Inc.

VOLUME I

WEST CHESTER, PENNSYLVANIA, JUNE, 1920

NUMBER 2

MAY MILK CONDITIONS

OUTLOOK FOR JUNE

Conditions in the Philadelphia Milk Market have, as far as prices of the basic supply is concerned, been unchanged. The \$4.14 per hundred or 9 cents per quart price for 4 per cent. butter fat milk, delivered Philadelphia, has been generally maintained and the same basis remains in effect for June. There still remains one or two uncertain points in outlying districts where adjustments are under way but not yet completed.

The increase of 10 per cent. over the October, November, December averages of basic shipment, became effective in May and will continue during June and July and that increase is to be taken into consideration when settlements for basic milk are considered.

Prices of surplus milk, based on 120 per cent. of \$2 score, solid packed creamery butter, New York City, fell off 33 cents per hundred pounds in May, when compared to April. This was to be expected. In April the high butter price was due to the short supply brought about by the restricted freight movement during and after the so-called "outlaw railway strike." There was no shipment for a time, from the west or any other distant points of supply.

Each territory for a time had to depend on its stock and on nearby supplies. Following the adjustment of the trouble and when the freight movement became easier the normal flow of supplies was resumed and with increased supplies, prices rapidly declined. The high mark during May was at 64 cents with 59 1/2 cents as the low level.

Several times during the month, some manufacturers of condensed products were threatened with suspension of operations owing to shortage of sugar. As this would have had a serious effect had such suspensions been for any length of time, the officers of the association lent their efforts toward better sugar supplies and were successful in having sugar interests agree to keep condensaries supplied.

Low butter fat tests have been coming to light frequently, particularly in connection with tests on which payment for April milk were based. This appears to have been more or less gen-

eral this spring. Frequent check tests have been made by association testers, who, in the majority of cases have confirmed dealers tests. Unfavorable weather conditions and forced feed changes due to high costs of prepared concentrated feeds may have contributed to this condition. The unfavorable weather retarded spring pasture and many dairymen were almost, if not entirely out of their usual supply of roughage before the end of April.

Here is where the basic and surplus price plan showed its value as a price stabilizer. Dairymen were paid full prices but under the old method it is quite evident that a reduction in price, to take care of this surplus would have been asked for.

At present cost of production, dairy farmers would not have been able to make any price reductions except that they incurred a pronounced loss. Even at present prices many dairy farmers are not able to make both ends meet.

(Continued on page 7)

THE NEW YORK MARKET

The Dairymen's League, Inc., has made arrangements whereby it will sell as the agent of its members ALL their milk for the ensuing four months.

The prices per 100 pounds for milk testing 3 per cent. butter fat, as compared with prices received during the corresponding months last year, are as follows:

	1920.	1919.
June	\$2.83	\$2.89
July	2.95	3.01
August	3.35	3.13
September	3.95	3.21

prohibition, have entered the ice cream field. They have put to a very good use a large quantity of milk that formerly was included in the so-called surplus.

Dealers have not been complaining of the June surplus as in former years. This is due to the fact that they have been making a great deal of butter. Receipts of fresh butter have been far behind the figures of former years. During the month of May, New York city received 134,000 fewer packages of

butter than in May, 1919. Much of the falling off was blamed on railroad congestion and the tying up of freight traffic. Some of it was due to reduced production in butter making sections. The dealers have benefited from the unprecedented situation by manufacturing milk into butter at usually stiff prices for this season of the year.

Dealers are now posting notices on some country milk stations urging farmers, not only to bring in more milk, but also new customers.

With the better prices obtained by the league for the next few months, the prospects for the milk producers are exceedingly encouraging.



Four cents per 100 pounds are added for each one-tenth of 1 per cent. butter fat in excess of 3 per cent.

The price for May was \$2.55 per 100 pounds for 3 per cent. milk.

Surplus milk, normally the highest in June, will be below the normal this month. Indications are that in the next few months—a period of decreasing flow—there will be a pronounced shortage of milk.

There are several reasons for a reduction of the surplus, which ordinarily comes in June. Farmers have been obliged to reduce feeding because of the very high price of feedstuffs, thus curtailing the flow. Evidence of reduced feeding was noticed in the poor condition of cattle in many sections of league territory when they were turned out to grass. The development of pasturage has been slow, owing to the backward spring season, and this, too, has curtailed the flow.

There has been a big increase in the manufacture of ice cream. Many breweries, put out of commission by

MILK SITUATION IN BALTIMORE

The June price continues as in May—37 cents a gallon for the basic quantity and 31 cents a gallon for surplus.

Owing to the cool weather in May the consumption of milk has not been as great as we had expected, making the market very dull with the dealers, they having large amounts of surplus to deal with. Again we find many members producing twice and three times as much milk on pasture as they were producing during the fall and winter, while a number of our most successful dairymen are not shipping more than the average amount that was established during the four fall months.

We also find a great many new beginners in the dairy business, having discontinued the beef cattle production as being unprofitable. All this has a tendency to weaken our present market, with indication of the usual shortage during the fall and winter.

In order to stabilize our market it

(Continued on page 6)

DAIRYMEN!

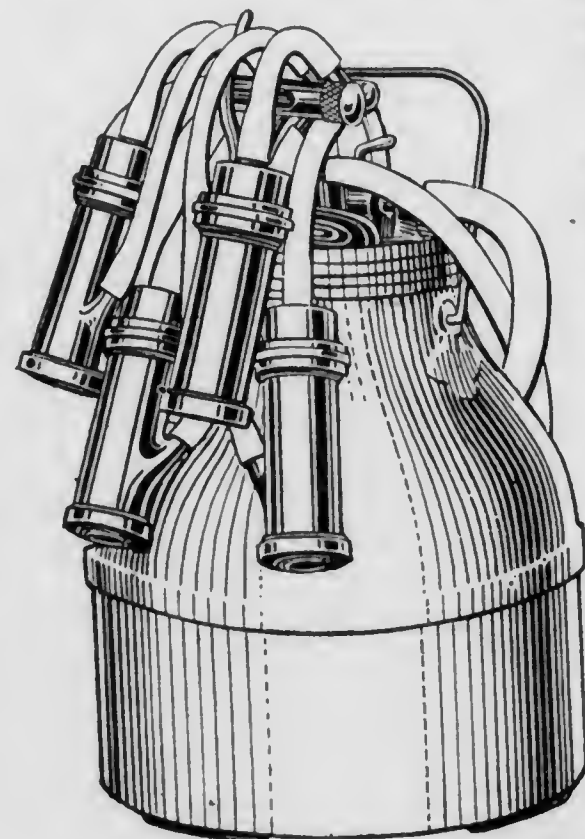
What about your equipment?

RIGHT near you in Philadelphia is the largest and most complete Farmers and Dairymen Supply House in the East.

When you buy from this headquarters there are no delays through slow freight travel and far away shipments. We are handy to supply all of your wants quickly.

We are headquarters for the famous DeLaval cream separators, coolers, milking machines—we carry them all.

And we carry a large stock of everything for the modern dairy. We therefore can guarantee prompt attention to your orders.



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Philadelphia Farmers and Dairymen Supply Co. Inc.

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America's Best ONE PIPE

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No Wall Cutting
No Piping
SAVES MONEY

More Heat Less Fuel

Investigate this proposition
Write for information

Floyd, Wells Co.
ROYERSFORD, PA.

Manufacturers
Heaters, Ranges, Stoves, Etc.



A silo ought to last as long as the barn it is attached to.

—A new theory to some, but not too advanced to fit the Green Mountain standard of construction.

GREEN MOUNTAIN SILOS

The new hip roof adds distinction and gives extra capacity. Green Mountain silos are of heavy, well-fitted lumber, dipped in creosote preservative. Hoops are of extra heavy steel with rolled threads. The doors fit like safe or refrigerator doors—a patented feature. The ladder is all-wood to prevent frost fingers in winter. Warping, twisting or blowing over is prevented by new anchorage system.

Write for free literature
Greenmounty Pkge. Mfg. Co.
335 WEST ST. RUTLAND, VT.



The original ear label, used by many Record Associations and best breeders. Will identify your live stock and aid you in keeping breeding and production records. Samples free.
C. H. DANA CO., 87 Main Street, West Lebanon, N. H.

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS

NEIGHBORLY CHATS

(By N. S. G.)

"Good morning, Cyrus," said farmer Winnie Blackburn, who was carrying his milk cans from the spring to the roadside, from where the truck would take them to the receiving station, to his neighbor, Cyrus Noble, who was passing with his team on his way to town.

"Cyrus, what are you hauling today?" asked Blackburn, who though considered a neighbor, lived across the mountain in the next valley.

"I must have another load of dairy feed," replied Cyrus, as he flitted the raw-hide whip which he was accustomed to use freely on his poor lean horses.

"Great Scotts!" said Blackburn; "you are not laying in another supply at such high prices, are you? I believe I saw you take home a load only three days ago."

"That's a fact," replied Cyrus, "and one more feeding will finish that up."

"Please, do not think it bold of me," said Blackburn, "to tell you that I believe you are wasting a lot of feed on your cattle. I wonder if you have it properly balanced."

"Properly what?" said Cyrus, in a tone of astonishment.

"To be more specific—do you feed a balanced ration?" replied his good neighbor, around whose farm there seemed to be an atmosphere of prosperity.

"What in all creation is that?" came the reply from the neighbor, with an expression of curiosity stealing over his face. "Winnie, you have me guessing now. Never heard of such a thing all these twenty years I have been farming. Would you mind telling me just what you mean by your flowery terms?" Cyrus was becoming curious as he placed his whip in the socket, wound the reins around it and assumed a restful position on the cushioned seat of the heavy wagon on which he had hauled many tons of feed over the mountain, knowing that at the end of the year the feed bill would eat up almost the amount of his milk checks.

Before Blackburn could edge in a word of reply, Cyrus continued, saying "that he would like to see the man who could stand up and truthfully say that he was able to make both ends meet in the dairy business. High prices for cows, feed and labor and low prices for milk will eventually force us all out of business."

"Just a minute," said Blackburn. "Your last statement makes me ask you a question. How many farmers in your valley belong to the Milk Association?"

"Why," replied Cyrus, "we have only one dealer in our valley and he can control the business without an association; why, he has no competition."

"Cyrus," said Blackburn, "you don't understand me. I asked you how many farmers in the valley are members of the Milk Producers' Association that has helped to put dairying on a good sound basis in our section? The association that has brought about a better understanding between farmers and dealers. An organization that is being run by farmers and that has demonstrated that the tillers of the soil no longer have to tolerate

dealings that are not fair to them."

"Winnie Blackburn, are you rehearsing a political speech or are you giving me facts?" shouted Cyrus.

By this time both had forgotten that they had started to discuss the feeding question. Organization seemed uppermost in the mind of Blackburn and he preached it whenever the opportunity offered. Noble's lean horses had by this time walked to the side of the road where they were biting away on the whitewashed rails of the fence which enclosed Blackburn's family orchard and the wagon stood diagonally across the road, blocking the traffic.

"Do you recall, about a year ago, I sent you a card asking you to a meeting over in the school house?" continued Blackburn more earnestly than before. "Well, that evening a man from the Inter-State was up here to settle a dispute between a dealer and one of our farmers, but that was not the best part of the program. He brought with him about fifty lantern slides and a stereopticon machine that showed the pictures on a screen. Cyrus, you missed half your life staying home. Everybody who was there talked about it for a long time. Before then most of us never knew what happened to milk after it left the farm, but we know now. Well, sir, that man showed every process that milk is put through from the time it leaves the cow until it gets to the consumer."

"There was a picture which made some of us feel a bit uneasy at the time, but we were to blame. Do you know there was a picture of a machine—he called it a clarifier—through which milk is put to take out the dirt? We never realized that such expensive machinery was necessary to make milk fit for human consumption, but, believe me, we have made up our minds that if he ever brings pictures again, we will not feel like hiding our faces in shame when we see the clarifiers. Why, do you know, Cyrus, that picture did more to improve the quality of milk in our valley than a twelve-hour talk from a dealer."

"This man from the Inter-State, who showed those pictures, was a bit rough on George Hope, the man on the Bailey farm. You know George allowed his family only one quart of milk a day except on Sundays or when some friends were coming and then he would let them have another pint. Well, this fellow said it was a crime for a farmer to give his children less than a pint of milk a day and you know George has six children. Say, that man Hope has changed a lot since then, they tell me. The Hopes always had a lot of sickness every spring, for years back, up until this year. George wouldn't admit it to me, but I overheard him tell some farmers, over at the horse sale last week, that he was convinced that plenty of good milk was keeping his children healthy."

"Cyrus, I never was so proud of my country as I was after I saw how people in other countries carried on their dairy work. They have crude equipment and no labor saving devices. Dairying is a good deal more of a drudgery with them than with us."

(Continued on page 7)

USE OF THE SILO

A. L. HAECKER.

The first and most important use of the silo is to store succulent forage for winter and summer use. Some farmers get a large service from their silos by keeping them employed as storage for fodder. I know of cases where the silo has been filled in the fall with corn, fed out during the late fall and early winter months, and filled in January with shocked corn with water added. This, if properly made from good fodder, produces an excellent silage and very much better results can be obtained than feeding the fodder dry. An early planting of oats and peas in March or early April will mature a good crop in June, which can again be put in the silo and fed out during July and August when pastures are poor and feed scarce. In this way it is possible to use in a practical and economic way the silo three times a year. Few farmers or stock keepers aim to put all their corn in the silo. This means that a large amount of corn stalks must either be left in the field as stalks or cut and put in shocks as fodder.

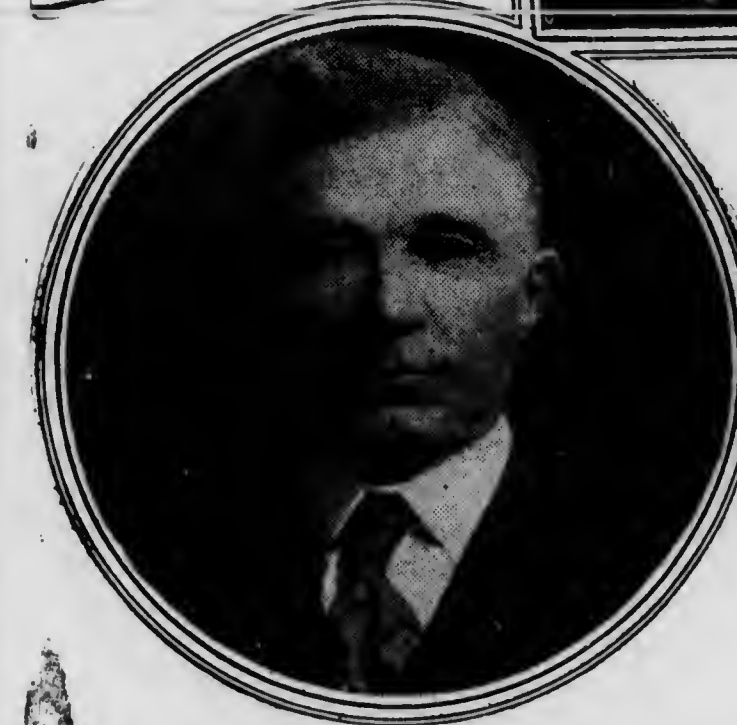
The prevailing high prices for hay demand that fodder should be carefully saved, and it is very practical and wise policy to cut up the corn in the fall before it becomes dry or frosted and put in large well-built shocks. It can then be fed as fodder, shredded, cut up, or put in the silo.

It sometimes happens that a silo will not be used for fodder where herds are sold or stock disposed of. The silo in this case can be turned to excellent use as a storage for grain. It is the best kind of granary and many of them are being used for this purpose. I have a friend who makes it a point to put up ice in his large silo each spring. He has two winter silos, feeds out the large one first and the smaller diameter later, then fills his large silo with ice, which supplies him during the summer months. By using sawdust around the edge, the silo will prove an excellent ice house.

There are many farmers who feed cattle only when conditions are favorable. The market may favor their decision in this venture, or it may be they will have a surplus of fodder or feed which they consider can best be marketed through cattle. These men certainly need a silo or two even though they use them only once in three years. It will give them an opportunity to save forage crops which otherwise might be wasted, and the silo in this case serves as a forage insurance and stands ready to make a feeding operation profitable.

8-Inter-State Review

With these many uses, the silo should be considered as one of the most important equipments on the farm, and the stock farmer should build it as he builds his barn. Several years ago the statement was made that a silo was needed wherever a corn crib was found, but present day experiences has proven that a silo is often needed where a corn crib is not. There are large sections in the Northern States where corn seldom matures but the silo is depended upon to harvest the crop. There are also cases where the bulk of the corn raised in a community goes into the silo. We now, say, a silo for every barn.



E. J. AKINS

milk falls off. I've seen it happen many a time. But since we've been milking with the Perfection our cows are milked with a gentle downward squeeze the year round. The cows like it better than hand milking."

The Boys do Milking Now

"I hardly ever milk anymore myself. My two boys, 12 and 14, handle the job alone with the Perfection Milker. I can tell you there's nothing more popular around this place than our Perfection."

Our Perfection Milker has been just like a catching disease in this neighborhood. As soon as I got it everybody else saw it and wanted it. There are quite a number of Perfections around here now."

Mr. Akins Says The Perfection Milks More Gently

"Our Perfection is the best milker we've ever had," said E. J. Akins when asked how he liked his milker. He held up his hands and looked at them. "You know at this time of year when a farmer is using tools his hands get stiff and hard and no matter how much he tries to milk gently, he simply can't do it. His hands hurt the cows and the cows like it better than hand milking."

Send For Names, Addresses, and Catalog

It's not necessary to add anything to what Perfection owners say. Their own words are selling Perfection Milkers as fast as they can be installed. We'll gladly send you names and addresses so you can investigate for yourself. Also a free copy of "What the Dairyman Wants to Know", the great book which answers every question about milking machines. Write. Today.

Perfection Manufacturing Company

2168 E. Hennepin Avenue

Minneapolis, Minnesota.

PERFECTION MILKER

Bags

We pay 14c each for beet pulp bags. Proportionate prices for other sizes.

Better write for price list NOW

Larimer Bag Co.

WASHINGTON, D. C.

Sacks

Prest-O-Lite

STORAGE BATTERY SERVICE

Prest-O-Lite Service Prevents Costly Repair Bills

YOUR storage battery should be tested regularly. Perhaps it needs repairing—who can tell? There's one sure way to find out. Call and let us test your battery today. Should a test indicate the necessity for repairs, we have a service battery for you to use while the work is being done. You have the continuous use of your car. When your battery is ready we will notify you promptly. You will be agreeable surprised at the moderation of our charges in these days of high prices.

Pusey-Young Storage Battery Station

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WEST CHESTER, PA.
FELLS GARAGE, BERWYN, PA.

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS

INTER STATE MILK PRODUCERS REVIEW

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Application for entry as second class matter is pending.

Editorial

Meetings of the officers of the various locals in several counties have been held during the month past with a view of carrying on a systematic drive toward increased membership. It has been clearly demonstrated that the weight of numbers has been able to bring results embracing benefits which no individual farmer or even a poorly organized local could accomplish.

Membership in the Inter-State Milk Producers Association means protection—just how fully depends on the strength of the organization, not only on the whole, but also the strength of the individual local.

The association on the whole, takes up the broad questions involved in the marketing of the milk generally, but the individual local has its own peculiar part to perform; not only as a part of the Inter-State Association, but more particularly in connection with the individual conditions surrounding the marketing of milk in its own particular territory.

Our readers would be surprised if they knew the various angles of the milk situation the officers and directors of the association were brought in contact with from day to day. Milk is still handled and marketed in various ways, in some instances according to old customs, in others along more modern methods.

"See that bunch of horses over yonder?" asked a farmer, indicating six or seven animals which were impatiently crowding against a fence in an endeavor to get at some corn growing just beyond their reach. "There's a marketing lesson in what those horses are doing. If they only knew that a little concerted pushing would lay that fence flat, they could get what they were after—but the trouble is—they don't understand—won't push together. "Human folks are something like those horses—many of them don't know how to push or pull together—in other words, to co-operate." A good many farmers have learned the big advantage in co-operation, but their number is still small compared

to the vast numbers who might benefit from it.

It would be the ideal condition if all the milk could be marketed under the same methods and by the same standards, but we have not reached that point. The factors which govern conditions in your vicinity may have little bearing at some other point, so that the value of strong locals means much for the individual community and the methods employed in marketing milk in that community.

Do our members have any troubles? Sure they do. Sometimes we can adjust them with little difficulty. In other cases we find our hands tied without the support of a strong local. It's up to you to see that your local carries the bulk of the dairy farmers in your district. We may not always reach the 100 per cent. mark, but the stronger you are, the better off you are.

Active campaigns for better representation are now on in several counties. Plans have been made to get those sections not fully represented, better organized.

How often does your own local meet? Getting together frequently helps wonderfully. Monthly meetings are held in some districts and should be held by every local. Keep yourselves fully posted on conditions. Read the Milk Producers Review—read all that's printed in it—then you will be posted how to come back at the "Knocker." The fellow who does not come along, but nevertheless is riding on your wagon, while you pay the freight. Get busy, get him in line—make him bear his share of the expense. If you, Mr. Reader, happen to be a knocker yourself, tell us about it—maybe we can get together and help you—maybe you might be able to help us, we don't know it all. We have helped a lot of your kind of fellows before and still have room and energy enough to take on more.

Now let everybody put their shoulder to the wheel, get the buggy or the automobile moving and round up a few, and if you are short of printed matter or have any troubles, call on us and let us help you out.

LOW TESTS

In many instances complaints have been received regarding low butter fat tests during March and April. These have not been confined to any one district or territory but more or less general throughout the Philadelphia Milk Shed. We have been checking up the different reports and in a large majority of cases we have found that the low butter fat content was correct. There have been exceptions here and there and in such cases proper adjustments have been made.

Just what explanation is to be offered for the apparent decrease in butter fat is problematical. A number of factors may lend to the condition. With feeds high in cost there has been a disposition to reduce the amount of concentrated feed used. Early pasture has been practically a failure. The late spring found many dairymen out of their usual feed and roughage. Changes and substitutions were necessary, which may have had some bearing on the quality of the milk produced. The present spring, while not entirely unusual in weather conditions, has been an extremely trying one on dairy cattle. Conditions on the whole

have been out of the ordinary and may all have a contributing cause to decreased milk yield and lowering of quality.

SOUR MILK SEASON

It seems to be a great temptation, particularly at this season, to take a chance on milk reaching the delivery point without going sour. Extraordinary care should be used to have milk delivered to the buyer, at all times, in good condition. Sour milk at the delivery point not only involves a money loss to the farmer but in many cases means an added expense to have it brought back to the farm. If you have sour milk you alone have to stand the money loss. It is therefore for your own interest to save this loss by taking proper care of your milk.

Cooling is necessary, not only when milk is shipped direct to the dealer, but also when it is taken to the creamery or receiving station.

Particular care should be given to the cleaning of cans and milking utensils. Use some good germicide to insure absolute cleanliness. Be particular about your strainers. A little sour milk left in cloths or strainers starts the souring process quickly.

Proper cooling will do more toward keeping clean milk from souring than anything else. Remove the animal heat quickly and keep milk cool and you will have little trouble in marketing your milk.

An idea prevails that it is only necessary to put cans in a trough of water to cool milk properly—but much depends on that "trough of water." Frequently the number of cans of milk in the trough quickly raises the temperature of the water to a point that it has no more cooling effect. Running water provides the best ordinary cooling method, together with vigorous stirring.

If you will give just a little more time and attention to the care of your milk before shipment, better results will undoubtedly be obtained.

CROP CONDITIONS AND LABOR

Unfavorable weather conditions continue to influence crops in this territory. From statistics now available from the Pennsylvania Department of Agriculture, it is estimated that the condition of the wheat crop, as of May 1st, represents about 87 per cent. of normal. This would represent a decrease of almost 2,000,000 bushels in that state, as compared to the yield in 1919. The rye crop was 90 per cent. below normal while the hay crop was about 93 per cent. of normal.

The prospect for a normal fruit crop, from information of May 1, is estimated as follows: Apples, 95 per cent.; pears, 93 per cent.; peaches, 85 per cent.; plums, 90 per cent. and cherries, 92 per cent. The condition of the fruit crop this year is materially better than one year ago.

The labor situation continues very unsatisfactory. Secretary of Agriculture Fred Rasmussen, recently stated that 81,140 farmers in Pennsylvania were short of labor. Not only in Pennsylvania but in the country in general there is a heavy proportionate shortage of help. Not only has the scarcity of help decreased the crop production in many sections, but the relatively high wage has restricted the employment of help on the farms.

LOCALS

Chester County Meeting

A meeting of the officers of the various locals of the Inter-State Milk Producers Association in Chester County, Pa., was held at West Chester on Saturday evening, May 22nd. Over 50 representatives from the 20 different local organizations attended. Robert F. Brinton, a director and member of the executive committee of the Inter-State Milk Producers Association, was in charge of the meeting and on calling it to order explained that it had been called so that the officers of the various locals might meet each other and interchange ideas as to the development of territory not represented and the methods to be employed for its organization.

Mr. F. P. Willits, president of the Inter-State Association, was introduced and briefly told of the general work of the organization, the necessity for an increase in general membership.

"Chester county," he said, "had the largest individual membership of any county in the organization and still lacked many members. It is difficult to satisfy all but as the association's strength is in proportion to its membership, we must endeavor to get every dairy farmer interested in our organization. Milk buying is becoming more and more centralized, and to meet this our organization must be just as strong as the buyer. Ours is a spirit of co-operation as far as the dealer is concerned, it is not our intention to dictate—much more can be gained by a spirit of harmonious action than by antagonism."

Mr. Phillips, member of the National Dairy Council, said "that all interests—producers, dealers and manufacturers alike were laboring along the same broad line of advancement—the general food value of milk. We must get consumers to understand the need of milk as a food and to increase its consumption. From the standpoint of a food 300,000 to 600,000 more quarts of milk per day should be used. It is the duty of every dairy farmer to join and help in the work of the organization."

Newton S. Gotschall, of Montgomery county, gave an apt definition of co-operation in explaining what was necessary in field work toward organization. "Co-operation," he said "was conducting one's self so that others could work with us." "The farmer will not be satisfied," he said, "until he gets recognition and to do this they must co-operate." "The selling plan, introduced last January, was the best ever launched. Some dairy farmers found it a bit confusing, but after explanation, it has had almost universal approval."

A. A. Miller, editor The Milk Producers Review, the organization's new means of getting news of the association work before the members each month, briefly related the field and scope of the paper—its value from a standpoint of information as well as an advertising medium.

DO YOU KNOW—

That—Bad can lids lead to the loss of milk in shipment?
That—Dented and battered cans decrease the holding capacity?
That—Warm milk at the barn, shows a decrease in weight when cool?

LATEST MARKET PRICES

PHILADELPHIA MILK PRICES

JUNE, 1920
Subject to change whenever warranted by market conditions

Test	Price per cent. 100 lbs.	Basic Quantity Price per quart	Price for all milk above the Basic Quantity
3.1	\$3.74	8.1	6.6
3.1	8.78	8.2	6.7
3.2	8.82	8.3	6.8
3.3	8.86	8.4	6.9
3.4	8.90	8.5	7.1
3.5	8.94	8.6	7.1
3.6	8.98	8.65	7.15
3.7	9.02	8.7	7.2
3.8	9.06	8.8	7.3
3.9	9.10	8.9	7.4
4.0	9.14	9.0	7.5
4.1	9.18	9.1	7.6
4.2	9.22	9.2	7.7
4.3	9.26	9.3	7.8
4.4	9.30	9.35	7.85
4.5	9.34	9.4	7.9
4.6	9.38	9.5	8.0
4.7	9.42	9.6	8.1
4.8	9.46	9.7	8.2
4.9	9.50	9.8	8.3
5.0	9.54	9.9	8.4

When milk is not tested the price f. o. b. Philadelphia is 9 cents per quart.

RECEIVING STATION PRICES

Less freight and Receiving Station charges

Miles	Test %	Basic Quantity Price per 100 lbs.	Price for all milk above the Basic Quantity
1 to 10 incl.	3.1	\$3.28	5.6
11 to 20 "	3.1	3.27	5.64
21 to 30 "	3.2	3.26	5.68
31 to 40 "	3.3	3.25	5.72
41 to 50 "	3.4	3.23	5.76
51 to 60 "	3.5	3.21	5.80
61 to 70 "	3.6	3.20	5.84
71 to 80 "	3.7	3.19	5.88
81 to 90 "	3.8	3.18	5.92
91 to 100 "	3.9	3.17	5.96
101 to 110 "	4.0	3.16	6.00
111 to 120 "	4.1	3.15	6.04
121 to 130 "	4.2	3.14	6.08
131 to 140 "	4.3	3.13	6.12
141 to 150 "	4.4	3.12	6.16
151 to 160 "	4.5	3.11	6.20
161 to 170 "	4.6	3.10	6.24
171 to 180 "	4.7	3.09	6.28
181 to 190 "	4.8	3.09	6.32
191 to 200 "	4.9	3.08	6.36
201 to 210 "	5.0	3.07	6.40

Freight rates deducted on a basis of 46 quarts—113 per cent. of 40 quarts, plus 3 per cent. war tax.

Prices for milk above basic quantity based on 120 per cent. of the average monthly or semi-monthly price of solid packed 92 score creamery butter, New York City, in May, June and July an increase of 10 per cent. and in August an increase of 5 per cent. in the basic quantity of milk shipped is allowed.

SURPLUS BASIS PRICES

Month	First half	Average per month
January	\$3.16	\$3.12
February	3.20	3.18
March	3.14	3.19
April	3.38	3.43
May	2.96	3.00

JUNE COMPARATIVE PRICES PAID

Philadelphia, 50 mile zone	Basic	Surplus
New York, 200 mile zone	3.23	
Pittsburgh, outlying points	3.15	
Chicago, country plants	2.70	
Boston, 3.7 per cent. fat	4.18	
Baltimore, per gallon f. o. b.	.37	.31
Cleveland, per gallon, f. o. b.	.33	

RETAIL MILK PRICES

Subject	Quarts	Pints
Philadelphia	14	8
New York	15	8
Pittsburgh	15	8
Baltimore	16	8

MAY BUTTER PRICES

92 score solid packed creamery butter, cents per pound	Philadelphia	New York	Chicago
1	65	64	61 1/2-62
2	62	63	61 1/2-62
3	62	63	62
4	62	61 1/2	60 1/2-61
5	62	60	58 1/2-59
6	61	60	59 1/3
7	63	62	59 1/2
8	63 1/2	63	57 1/2
9	62	60	57 1/2
10	60 1/2	59 1/2	56 3/4
11	60	60	57-57 1/2
12	60 1/2	61 1/2	57 1/2
13	61 1/2	62 1/2	56 1/2
14	63	64	57 3/4
15	63	64	57 1/2
16	64 1/2	64	57 1/2
17	64	61 1/2	55-55 1/2
18	62	61 1/2	55
19	62	61 1/2	54 1/2
20	62	61 1/2	55
21	62	61 1/2	55
22	62	61 1/2	55
23	61 1/2	61 1/2	55
24	61 1/2	60	54
25	60 1/2	59	53
26	60	59	53
27	60	59	53
28	60	59	52 1/2-53
29	59	59	51

PRICES PAID PRODUCERS

f. o. b. dealers station
And retail selling prices, Market Milk, nearby cities and towns

Producers	Quarts	Price	Retail	Quarts	Price
Allentown, Pa.	8 1/2	14	8		
Bethlehem, Pa.	8 1/2	14	8		
Camden, N. J.	9	14	8		
Harrisburg, Pa.	8	13	7		
Lancaster, Pa.	7 4/5	12	6		
Norristown, Pa.	8 1/2	13	7		
Princeton, N. J.	8 1/2	14	8		
Pottsville, Pa.	9	14	8		
Reading, Pa.	8 1/2	12	7		
Trenton, N. J.	9	14	8		
Wilmington, Del.	8 1/2	14	8		
West Chester, Pa.	8 1/2	14	8		
York, Pa.	8	13	7		

Baltimore Milk Condition

(Continued from page 1)

is necessary for each producer to more nearly equalize his shipments during the year. This can be done without any serious difficulty and will greatly strengthen our market at this period of the year.

One of the most important things we can do at this time is to increase the consumption of dairy products. With this end in view we have held two milk demonstrations in Baltimore, co-operating with the Women's Civic League, Health Department and the Milk Distributors.

The first one was held in connection with the Annual Flower Show, given by the Women's Civic League, and was well attended. Much interest was shown by the consumers. The second was held in Osler Hall, under auspices of the Women's Civic League and the Medical and Chirurgical Faculty of the Johns Hopkins University.

We believe in co-operation with all the agencies that are a part of the great dairy business, as by working together we can accomplish more than in any other way. D. G. HARRY, President Maryland State Dairymen's Association.

NATIONAL DAIRY SHOW

The National Dairy Show belongs to the people of the dairy industry. It is a membership organization made up of men like yourself, who desire to know what is going on in their industry and to learn how they can expand their business.

There are no dividends. It is not for profit, but is simply a means to the end of bringing this great industry into its own as quickly as possible.

The show visualizes the immensity and importance of the industry covering sanitary production, manufacture and marketing of this vital food.

Don't forget the date—October 7 to 16th, Chicago, Ill. Make your arrangements to go.

Avondale-W. Grove Cow Testing Ass'n

Mr. J. B. Vollmer, tester of the Avondale-West Grove Association, reports that although more cows were tested during April than March, fewer made 40 lbs. of fat or 1200 lbs. of milk, bearing out the common experience that April is one of the most difficult months of the year to keep up the milk flow.

Number of cows tested, 374, with best four as follows:

Owner	Breed	Lbs. Milk	Lbs. Butterfat
J. M. Hutchinson	R. H.	1395	55.8
M. Michener	G. H.	920	53.2
J. K. Eves	R. H.	1665	51.6
S. G. Brosius	G. G.	1080	49.7

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Nearly everyone knows that SCHUMACHER FEED, as the carbohydrate part of the dairy ration, has more World's Champion Milk and Butter records to its credit than any other feed, but many stock owners are not aware that it is also an ideal feed for Hogs, Horses and all young stock.

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SCHUMACHER FEED is composed principally of linseed meal and specially selected by-products of corn, oats, wheat and barley, correctly balanced, finely ground and kiln-dried.

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SCHUMACHER is eaten with relish by horses and easily digested. It supplies the necessary stamina to enable your horses to stand up under heavy work without losing flesh.

SCHUMACHER FEED when fed to young growing cattle will prove to be the same profitable, result-producing feed as it does when used as a carbohydrate feed for dairy cows. It develops bigger bone, frame and vigorous body growth.

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		Huskers and Shredders	Pickers
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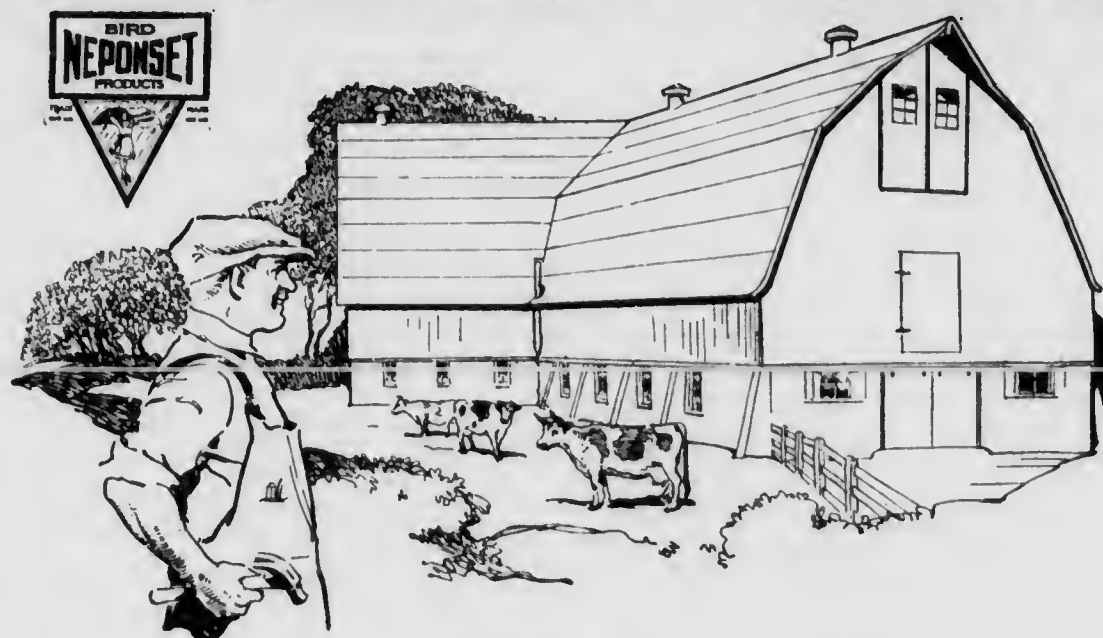
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For more than 20 years Neponset Paroid has protected cattle, poultry, stock, tools, equipment, crops, and homes from the attacks of rain and sleet, sun and snow—at the lowest service cost per square foot per year.

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repair NOW. You owe it to yourself to use Paroid. There's a Neponset Roofing for every need and every purse. If you do not know who is your nearest dealer in Neponset Roofs write to us. Send for full information.

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COW TESTING ASSOCIATIONS

All the more essential is the work of the Cow Testing Association at this time. Feed of all kinds is extremely high in price and the labor situation very unsatisfactory. Dependable labor is not only scarce but wages almost prohibitive.

The following statistics are available from the West Chester and Avondale-West Grove Cow Testing Associations, in Chester county:

Miss Myrtle Barger, the first lady cow-tester in the eastern part of the state gives the following report of the first month's work in the second year

Owner	Breed	Lbs. Milk	% Fat	Lbs. Butterfat
F. C. Brinton, Jr.	Holstein	2208	3.48	76.8
F. C. Brinton, Jr.	Holstein	2103	3.38	71.1
Greystone Jersey Farm	Jersey	1443	4.9	70.7
E. Page Allison	Holstein	1677	4.0	67.1
Westtown School	Grade Guernsey	1065	6.1	65.0
Highland Farms Dairy	Jersey	1125	5.3	65.3
J. L. Morris	Holstein	1893	3.4	64.4
Greystone Jersey Farm	Jersey	1347	4.7	63.3
Highland Farms Dairy	Jersey	1221	5.1	62.3
Highland Farms Dairy	Jersey	1233	5.0	61.7
Westtown School	Grade Ayshire	1182	5.1	60.3
Greystone Jersey Farm	Jersey	873	6.9	60.2

LOCALS

of the West Chester Association, beginning April 1st. Number of cows tested, 575, in 20 different herds. Twenty-three animals tested over 50 lbs. butterfat, of which number the following 12 produced 60 lbs. of butterfat or over:

All above animals were milked three times a day with the exception of F. C. Brinton, Jr.'s, which were milked four times and Westtown School cows

The Hanover, York County Local, held a meeting on May 27th, which was largely attended. Organization spirit was active and plans were made for an extensive increase in the membership. Further meetings for this purpose will be held early in June. Frederick Shangle, treasurer of the Inter-State Milk Producers Association made an interesting address on organization.

June, 1920

NEIGHORLY CHATS

(Continued from page 2)

"Where did you see this," spoke up Cyrus, after listening attentively for some time.

"Why, they were shown on the screen," continued Blackburn again, "also pictures showing us that if we expect to go ahead and make a success of dairying we must keep records of our cows. This they do through a cow testing association, and we must raise our own calves from our best cows bred to sires of merit, which they do through breeding associations."

Cyrus, with a sigh as if in pain, said: "I wonder when I would get my crops planted if I belonged to all your new-fangled associations. Remember I asked you to tell me why I was wasting feed on my cattle?"

Just then the milk truck rounded the bend in the road just beyond the barn, and until then Cyrus had not realized that he was blocking the road. Excitedly he took up the reins, applied the whip to his horses as they started away. "Say, Cyrus," shouted Blackburn, "bring your family over to our place and spend the evening and we will talk these things over in detail."

"Sure we will come over right soon," shouted Cyrus, as he urged his horses into a faster gait, with his favorite rawhide.

MAY MILK CONDITIONS

(Continued from page 1)

Many are now operating without profit and if the same conditions continue it will be necessary for the dairyman to have more favorable prices.

This condition has already been demonstrated by the action taken in one of the other primary markets. In New York territory, where prices during April were on a basis of \$2.55 per 100 pounds for 3 per cent. milk in the 200 mile zone—an advance to \$2.83 has been made for June with further advances effective each month until October.

Regulation Governing the Disposal of Carcasses of Dead Animals

The Maryland State Board of Agriculture has sent out a warning regarding the disposal of animal carcasses.

As the practice of allowing dead animals to remain unburied is a menace to the health of the live stock of the community, and a frequent cause of the spread of disease, it is hereby required that horses, mules, asses, cattle, swine or other domestic animals, having died from any cause, be burned, or buried at a depth of at least three feet, or sent to some establishment where dead animals are disposed of in a manner to prevent their becoming a menace.

The carcasses of animals known to have died of contagious or infectious disease must be disposed of in accordance with the requirements as set forth in Article 58 of the Annotated Code of Maryland.

MARYLAND STATE BOARD OF AGRICULTURE.

A. F. WOOD,

Executive Officer.

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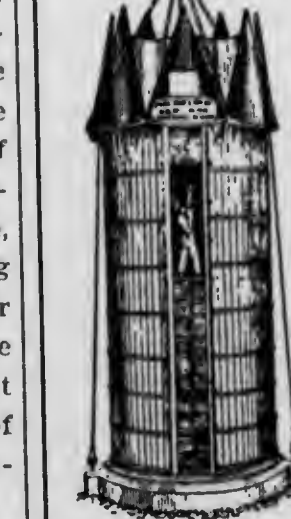
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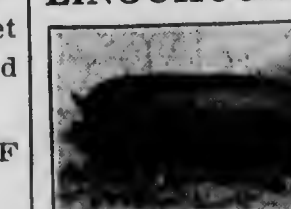
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EQUIPMENT

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Read the advertisements—keep posted on money saving propositions.

You Can Cut Barn Work in Half

In the barns that are James equipped, the increasing cost and scarcity of labor is much less a problem; for James Equipment makes barn work easy.

James Equipment not only cuts labor in two, but makes it possible for children to do work that without James labor-saving devices would require a man's strength; chore time becomes almost play time for boys who work in the barn.

Cleaning The Barn

The easy running James Carriers turn the disagreeable, dirty task of cleaning out the barn into a near-pleasure. They make a boy's job of what used to be shirked by all—and are an investment that pay profits of 25% or more a year in labor saved.

James Scrapers make quick work of cleaning cement floors; the James Stanchions, with the James Alignment Device, keep the stalls and cows clean, by aligning the cows at the rear, so that manure falls in the gutter and not on the platform.

Feeding The Cows

The easy way of feeding the cows is the Jamesway—the James Feed Truck or Feed Carrier, and James Feed Mangers. Rolling easily along the track or on the cement floor, the James Carrier or Truck make unnecessary the lifting of heavy baskets filled with feed. With their big, roomy tubs they save much walking to and from the feed rooms, and in a short time pay for themselves in labor saved.

Watering The Cows

What a job this used to be in winter time—keeping a fire going in the old time tank heater, or breaking the ice in the tank so that the cows could drink.

And how they hated to drink—with the north wind howling, the snow or sleet driving, and the drinking water icy cold.

James Drinking Cups have changed all that. A sanitary cup for each cow provides fresh water day and night. It flows in automatically as fast as the cows drink.

Water—the simplest means of increasing milk yields—is often disregarded by dairymen. Those who realize how greatly milk flow is increased by James Cups are reaping huge profits on their investment.

Reports based on milk records of 28 herds (739 cows) for instance, show an average increase per cow per day of 2.45 lbs. This is 490 lbs. in 200 days, which at \$3.50 per cwt. totals \$17.15; with a saving of \$2.50 per cow in labor and 55c in fuel. That's a profit of 400% the first year.

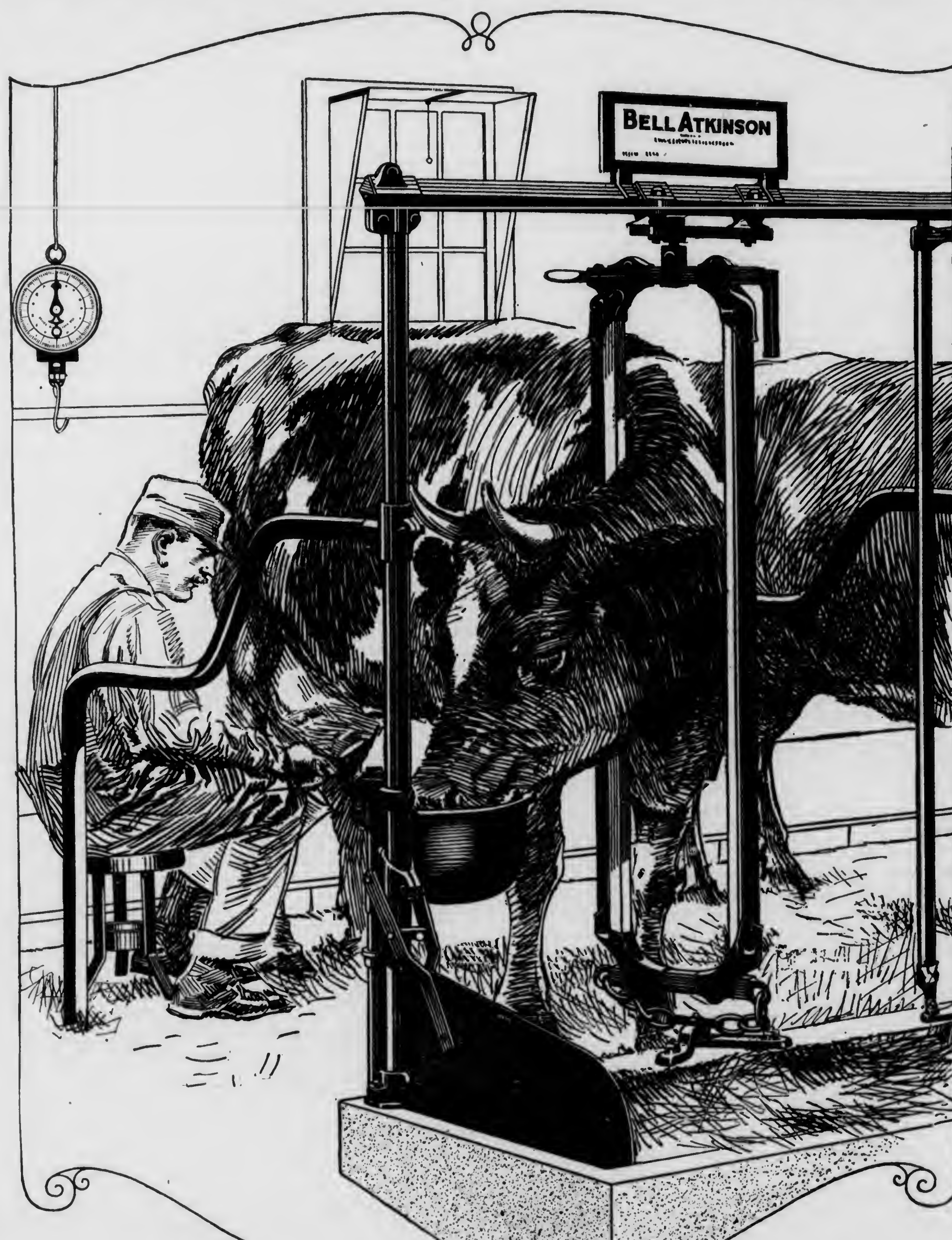
Other reports and other investigations confirm these figures. Ask us for the proof. Then get James Cups busy right away making these big profits for YOU.

"Airing" The Cows

Pure air is just as necessary to life and production of milk as feed and water.

And a cow needs TWICE the weight of AIR per day that she does of feed and water combined.

Do your cows get enough pure, fresh air? Food, water and air. The feed costs money—lots of it. But water and air are



free—the only expense is getting them to the cow, and that amounts to very little. The James Ventilators help get the foul air out of the barn, help bring the fresh air in to the cows. Ask for full information regarding these wonderful ventilators and about the James Ventilating System.

Other Work-Saving James Devices

There are many other James devices that save labor, increase milk yields, help sanitation and improve cow health, such as Cow, Calf and Bull Pens, Feed Mangers, Calf Pail Holders, Sure-Stop Swinging Post, Swinging Cranes, "Safety

First" Bull Staff, Handy Milk Stools, etc. Also equipment for the hog barn, horse barn and beef barn.

The James Way Sunny Hog Barn provides sunshine and sun warmth on the floor of every pen two-thirds of the sunlit hours. The James Hog Barn Book, sent on request, tells all about it.

Free Dairy Barn Book

The 336 page book—"The Jamesway"—tells all about the James inventions that save so much of labor, prevent spread of disease, promote better cow health, protect against dangerous bulls, make simpler the care of calves and sick cows, and increase milk yields.

Easy Installation

It explains the easy way of putting up carriers, setting up stalls and pens and attaching drinking cups.

Skilled help is not required, because of the ingenious James Anchors and because the equipment is assembled at the factory.

Barn Plan Service

It tells about James Barn Plan Service, the many James barn experts who are at your service—men who know what has been successful and what has not, what not to do as well as what to do in planning convenient, money-saving barns.

Their advice on barn planning, ventilation and other barn problems is free, with no charge for floor plans. Send for the book—a postal card request will bring it—get the full details of how to build a barn, how to ventilate a barn, how to cut the barn work in half, how to make more milk—and more money.

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VIEW WHEN WRITING ADVERTISERS MENTION THE MILK PRODUCERS REVIEW

INTER-STATE Milk Producers Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE INTER-STATE MILK PRODUCERS ASSOCIATION, Inc.

VOLUME I

WEST CHESTER, PENNSYLVANIA, JULY, 1920

NUMBER 3

JUNE MILK CONDITIONS

Outlook For July — Basic-Surplus Plan Continued For 1921

The supply of milk during June was, if anything heavier than anticipated. Surplus, at times was particularly large, principally from districts where summer milk is produced.

Under the present Philadelphia selling plan this large surplus was pretty generally absorbed. In some instances where shipments were made direct to small dealers, farmers were requested to withhold some of their milk, but the larger dealers received and paid for all the milk coming to receiving stations under the basic and surplus plan. At times prices of surplus milk, shipped direct sold on the city platforms, as low as five cents a quart, but under the existing plan, this had no effect on the general price situation.

In general the quality and condition of milk coming into the market has been somewhat better than in April and May.

Prices for June milk remained unchanged at 9 cents per quart or \$4.14

per hundred weight for four per cent. butter fat content, delivered Philadelphia, or \$3.61 per hundred at receiving stations in the 50-mile zone, for the basic quantity. An addition of 10 per cent. of the basic quantity however, as fixed by the October, November and December average is to be included in the basic quantity for June. This same increase of 10 per cent. over the basic quantity is effective in July.

The surplus price for June was somewhat lower than that for May. The butter market has been seasonably lower, due to the increase of the milk supply, the surplus being manufactured into butter. The surplus in June averaged about 33 1/3 per cent. There has been little interruption in the movement of butter from the large producing districts. The further railroad labor difficulties, which came to a head late in the month, resulting in some interruption of the freight movement, had but little influence on the butter market.

The average price of 92 score solid

packed creamery butter in June was 57 1/2 cents. Computed on 120 per cent. of this basis, the price for 4 per cent. butter fat milk, was \$2.76 a hundred

SECRETARY BALDERSTON

Writes About Milk Conditions in Germany

Essen-Rhur, Germany, May 30, 1920.

Dear Members of the I. M. P. A., and readers of the "Review",

I have just read over the first number of the official organ of our association.

very vivid idea of the market conditions that you have been facing as viewed from within, and furthermore I am proud of the way that our association has met the problems. At this distance, I could see the discouraging features of the condensed milk market. I

was daily in contact with the European agents and knew what low prices they were forced to meet in open competition with the other dairy countries of the world and in a market that could only pay in terms of a greatly depreciated currency or more often, I fear, long time notes with very uncertain security. I heard too from personal letters of the general market conditions at home and again I say that the association nobly vindicated the faith that its officers had, that it would stand to a man behind the new selling plan which has proven to be just what it was hoped it would be, a safe and sound method of adjustment during a very critical time in the affairs of the world.

But I know that somebody back there is saying, "why don't Balderston

stop commenting and tell us something about those things that he sees" and perhaps he is right. The chief dairy interest with which I come in contact here around Essen is the goat. Not that I have as yet had any physical "contacts" from the business end of this animal (it being at the opposite extremity from the business end of a typical dairy animal as Secretary Rasmussen would refer to it in a farmers institute) but that may come later.

This little milk producer is called the "Bergmann's Kuh" or miners cow and from the number that I see tethered along the roadsides and in the vacant lots, I should judge that many communities depended upon them now more than the visits from the very few dairy men that peddle milk through the streets. These goats show good average dairy capacity as far as I am able to judge. They seem to live with the family chickens, the occasional pig and also very intimately with the family itself.

(Continued on page three)



Girls of the Brooks School, Philadelphia Demonstration, Food Value of Milk

receiving stations. This is 24 cents a hundred lower than the May price. The average price of surplus milk, 4 per cent. butter fat, for the first six months of the year was \$3.11 per hundred, at all delivery points, with \$3.61 as the average price for basic milk. The average price for the first half of the year, basic and surplus in the Philadelphia market has been fully equal to the average price paid in the other important eastern markets.

The price of milk for July remains at \$4.14 per hundred weight or 9 cents a quart, delivered Philadelphia, for 4 per cent. butter fat milk.

A conference with the dealers, manufacturers and Milk Price Arbitrator for the State of Pennsylvania was held late in June, with a view of arriving at some basis for future milk prices. In view of the pronounced milk flow and the fact that the average weighted price paid for milk in this district during the first

(Continued on page three)

THE MILK PRICE SITUATION IN PHILADELPHIA

By CLYDE L. KING
Milk Price Arbitrator for Pennsylvania

The price of milk within Philadelphia early in the year was from two to four cents per quart below the price of similar grades of milk delivered to the consumer in any other large eastern city. In Baltimore and Pittsburgh the January price was sixteen cents per quart. In New York City and in Washington, D. C., the price for that month was eighteen cents per quart, as compared with fourteen cents in Philadelphia. Throughout the war period the Philadelphia consumer has paid a price below that prevailing in any other large city.

More important still, throughout the war period milk did not increase as rapidly in price to the Philadelphia consumer as did other commodities, comparing the increase in the price paid for all other commodities by purchasers in the United States, with the increase in the price of milk to Philadelphia consumers. Taking the prices on 1437 commodities, from 1913 to 1918, with the prices from July 1913 to June 1914 as a basis, the increase in price for all commodities was approximately 108 per cent., while milk increased about 75 per cent. Relatively, milk has been the best "buy" the consumer in Philadelphia has been able to make.

Has This Favorable Price to Consumers Been at the Expense of Milk Producers?

The milk supply is shortest in October, November and December. Milk production costs are much higher in winter than in summer. The result is that milk prices to the producer must be higher in autumn and in early winter to meet the farmer's heavier costs. During the season of short supply the farmers can run the price above the price fixed by national and international forces for manufactured milk products. But during the period of plentiful production the price to the producer of milk for city consumption cannot widely depart from the value of milk for manufactured products.

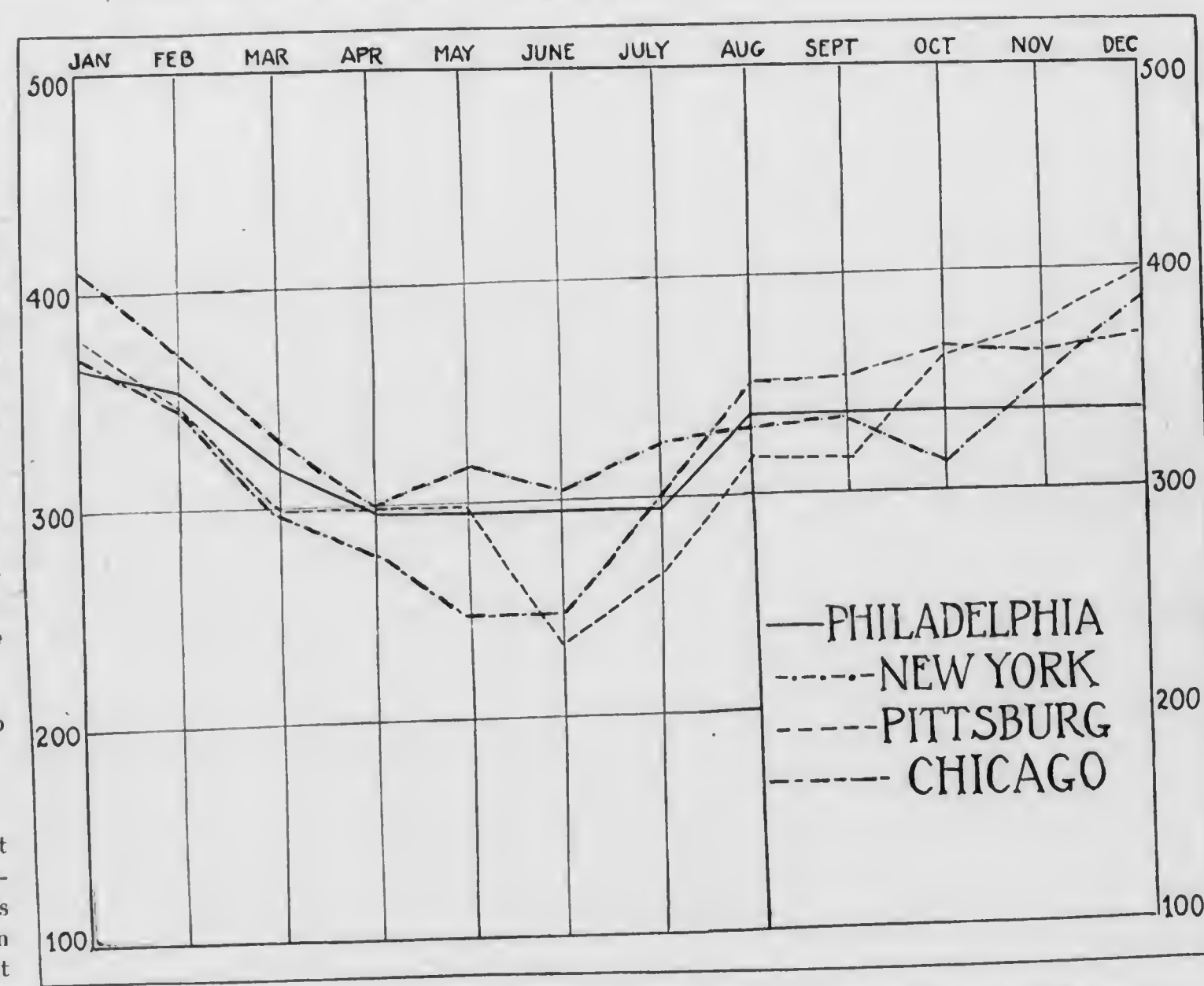
What the representatives of milk producers in any primary milk market can do is to push to the highest possible point the price of milk for city consumption in the months of scarce production. This has been the policy of certain dairy leaders elsewhere, but it has not been the policy of dairy leaders in the Philadelphia district.

Statistics show that Milk Producers in the Philadelphia district, through a ten years period, ending in 1916, received a slightly lower price than producers in New York, Pittsburgh and Chicago, in the months of January and December, and a higher price in May, June and July.

Inasmuch as about three times as much milk is produced in the latter group of months as in the former the net an-

mal money return to dairymen in the Philadelphia district has been as high as the net returns to dairymen in the other districts.

This market custom the producers in the Philadelphia District kept during the war period. Without this co-operation from the producers Philadelphia consumers would have had to pay higher prices than they did pay in the fall and winter months and hope for lower prices in summer months. Under this latter plan the average paid by consumers for the year would have been



higher even if the farmers net return had been the same, because of upset business conditions for the city milk distributor. To accept this policy required faith by producers that public officials, milk consumers, and milk buyers would not rush out to lower the price to the producer when they would have the power to do so in the season of greatest production to a point below that warranted by a fair consideration of the sacrifices already made by the producer to stabilize prices to consumers. In other words, the producers had to refrain from "getting all they could get" when milk was scarce in return for assistance to maintain a fair average price through the rest of the year, especially during the months of greatest production.

The annual price received by the farmers in the Philadelphia district in 1918 averaged as high as that received by producers in any primary milk market. Giving consideration to the higher price received by Philadelphia farmers during the seasons of greatest production, the milk producers in this district during 1918 received for the year as a whole the highest net money return received by producers in any primary market.

The risk taken by the Philadelphia

producers is thus helping to stabilize the price to the consumer is shown in the chart herewith comparing the prices received by Philadelphia producers in 1919 with the price received in that year by New York, Pittsburgh and Chicago.

An examination of this chart will show that for most of the year the monthly prices to producers in the Philadelphia district averaged well in 1919 with the monthly prices in other primary markets. In December, however, Philadelphia producers were receiving one cent per quart less than producers in the New York, Pittsburgh and Baltimore districts. This same inequity continued in January of 1920. In other words, the price to consumers in Philadelphia then would have to be one cent a quart higher than it is were those producing milk in this territory to receive as high a price as milk producers in other territories are receiving for these current months.

rise in the prices of all other commodities at any time during 1916 nor 1917, and barely caught up in January of 1918 and exceeded the usual average for a short time only in the latter part of 1918. In other words, the producers of milk and dairy products never received the increase in the price for their products other business men received for their products during the war period. To be fair, therefore, we must not only expect but encourage higher relative prices to producers of dairy products in the producing months ahead of us. These prices, it must be remembered, are comparisons of wholesale prices and not retail prices paid by the consumer. The extent to which retail prices to consumers on some food products have increased more rapidly than the price to the products is another matter.

Wholesale prices for edible vegetable oils, however, have increased more rapidly than the increases received by the producers and makers of all other commodities. The substitutes for butter have gone up in price (wholesale) more rapidly than has the price for butter.

The milk producer selling on the Philadelphia market has fared better than have producers in fats, meats and livestock throughout the United States. In 1913 and 1914, the normal seasonal variation in price to milk producers was above and below the current price level. In 1916 the price to producers in the season of greatest production fell as low as the price for milk in previous seasons, while the prices of all other commodities tended upward. In the years 1915, 1916 and 1917, the price of milk did not increase as rapidly as did the price level, and it was not until the early part of 1918 that the milk producer in this district received a seasonal increase above as well as below the price level of other commodities and an annual average price equal to the price of

Plans for maintaining the price now being paid to farmers in the Philadelphia district have been made through which it is expected that the price to the Philadelphia producers for the first half of the year will average as high as that received by producers elsewhere on an annual basis. If it should at any time become clear that this cannot be done, the price to the consumers in Philadelphia will have to be raised.

The price received by milk producers in this territory has increased in the same ratio that prices to producers elsewhere have increased and the Philadelphia market is in the best condition of any in the country. But consumers must realize that prices on the farm for milk have not increased as rapidly as have prices on all other commodities. In this general sense the low price of milk to consumers in all our cities has been at the expense of producers of milk throughout the United States.

The years 1913, 1914 and 1915, show the price of poultry and dairy products is above the average for other commodities for half the year and below the average for half the year. But the highest price received by producers of milk and dairy products never caught up with the

(Continued on page nine)

Secretary Balderston Writes About Milk Conditions in Germany

(Continued from page one)

They do not get much to eat in winter, I fear, for they come out of winter quarters looking very shabby, but the pasture season is quite long and the grass is green about the time that the most of the kids are born. There are also quite a large number of sheep kept, that have the advantage of yielding a fleece of wool every year in addition to the milk for the children. But the relatively greater hardness of the goat makes it the more general favorite. Dairy farming as such is almost never practiced in this territory. It is true that there are occasional meadows along the water courses, but they are very infrequent and do not play a very large role in the total milk production. But neither do the farmers in the agricultural areas just outside find much encouragement in dairying, when it is so utterly impossible to keep any grain for cows, all this being taken from them by the government for distribution to the approved bakers to be made into bread. At the present rate of exchange there is no possible way of making it pay to buy imported concentrates such as they depended upon before the war. When the shortages become so extreme that



"Miners Cow" in the Essen-Ruhr District of Germany

there is not milk for even the babies, then, if it can, the government imports some milk from Holland or Denmark as a temporary stopgap and sells it at the usual price, absorbing the loss, which usually amounts to several marks per liter or quart.

If I needed any proof of the value of milk in the human ration, I could have it here every day as I go about the various centers and see the little children that come or are brought to get the nourishing food that is furnished from the stocks sent over from the U. S. Our food as sent us, is about 20% condensed and evaporated milk by weight. This proportion has been carefully worked out by physicians who have been co-operating with the various food distribution organizations under the supervision of Mr. Hoover ever since the days of the feeding in Belgium. This milk is giving very general satisfaction and it is fine to know it when so many of the labels reveal the fact that much of it comes from I. M. P. A. territory. I see "Burdan Bros.," "Sharpless," "Nissly" and other familiar names.

I mention it here as showing that we can produce milk which when made into condensed goods will stand up in competition for the requirements of foreign shipment. When you see the cases inspected over here and see the milk fed you get the buyers viewpoint and you don't wonder that he is ever watchful to see how every brand will

bear such inspections and the presence of a few "swells" showing too much acidity or some dirt or a queer flavor will permanently impair the reputation of the brand.

Yesterday afternoon I had the good fortune to visit a large farm in the agricultural region to the south of us and perhaps you would like to hear how the methods differ from any farm in Pennsylvania under equally intelligent supervision. I say Pennsylvania because the land is rolling like in Chester or Lancaster county and the soil is also similar, being a clay loam with limestone quarries at many points in the neighborhood, though this rock does not come to the surface as a general thing. Listen to the rotation—potatoes and other vegetables or roots, wheat, oats, rye, clover, oats,—with no corn possible in this climate and with a pressing demand for grain, there is a maximum grown in a six-year rotation. All crops look promising, much more so than in the average of Germany, as I have seen it in my travels. The practice of plowing double for the crops, first shallow and then deeper, interests me but I am not an expert on tillage so I forbear comment except to remark that it makes a lot of additional work, for the soil receives the usual application of harrow and roller. I would like to try to prepare a field for them with an effective type of disc and see if it could not be done just as well and much cheaper. Not that I am going to try for I know too well how hard it is to get people at home to adopt improved methods or labor-saving devices and it is ten times harder here, where every one of the habits of the people dates so far back that nobody knows what it was that started it.

The horses used on this farm were fine specimens as individuals and all were of a splendid draft type. The favorite around here is the Rhenish or Belgian though I have seen many that showed the introduction of some Percheron blood from France. There were very fine colts about; the two-year-olds being large enough to do some work and the three-year-olds being in the regular teams. In the matter of selecting the proper type of horse for our use and then breeding for that type, we have much to learn from Europe, particularly England, France and Germany. Here the misfit, even in these days of shortage, is a rarity on the city streets and almost every horse seems to have been built for the particular work that he is called on to do, both in hauling the enormous drays, the huge coal carts, or on the other hand, racing around with the delivery wagons and private carriages. The high price of gasoline has kept down the number of autos and horse drawn vehicles are still much more common than motor driven in all the European cities, but especially in Germany.

I marvel too at the great amount of work that the horses can do with a feed of cut straw mixed with molasses and some other materials, probably slaughter house refuse such as dried blood. This combination was developed as a substitute ration during the war and I am told that the horses became very thin at first but now that they are accustomed to it they seem to be in remarkably healthy condition. Even on the farms this same mixture is fed on the straw that the grain can all be saved for the people's bread. The cows

do not seem to be faring as well except in the summer time, when they have pasture and fresh cut grass. Harvest is a somewhat different matter over here. The clover is ready now and will be cut during the next week but the grain does not all ripen with a rush so as to interfere with the hay harvest. I have not referred to labor conditions because they do not seem particularly interesting to you. Just now everybody is waiting to see if the farm-labor organizations will carry out their threat to strike on June 1st if they do not get double the wages that they do now. The other lines of work are becoming so slack that I do not think that there will be very much trouble in effecting a settlement if there is any definite movement.

By the time this letter gets to the editor I will have about completed the last assignment that I have had over here and will be arranging for some one else to finish it up for I have secured passage home in July. I hope early in August to greet my friends who care to look me up at the old familiar desk.

R. W. B.

JUNE MILK CONDITIONS

(Continued from page one)

half of the year, was on an even basis, as compared to the average of the principal eastern primary markets and the prospect that the situation in July would show no change, unless unfavorable weather conditions set in, it was decided that no change in price should be made for July.

The present basic surplus plan in operation this year, in the Philadelphia market, was discussed at length, and unanimously approved, and it was the consensus of opinion that the present plan with some minor changes, should be adopted for 1920-1921, beginning October first. Shipments of milk in October, November and December this year will be used to establish the average basic quantity of milk to be applied to the monthly shipments during 1921. Under this plan all the milk shipped during October, November and December, this year, will be considered as basic milk, the surplus deduction becoming effective January 1st, 1921.

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LEGISLATION REGARDING PENNSYLVANIA MILK PLANTS

The Act of Assembly of the last session of the Legislature of the State of Pennsylvania providing for the issuing of permits to milk plants buying or selling milk and cream on the butterfat basis and the licensing of testers working in connection with such plants, is being vigorously enforced by the Department of Agriculture.

The purpose of the permit is to make a matter of record every place in the State where milk or cream is handled; to determine the manner of conducting such business; to investigate complaints filed against such plants and to recheck all tests.

The licensing of testers employed in such plants insures proficiency in this character of work. The law requires every milk tester to take a rigid examination before he can qualify for such position and also supply two letters of good character from responsible persons, which safeguards the patrons of such plants from unscrupulous persons.

The Department proposes to recheck the tester's work for the benefit of both the management and patrons of such plants.

This law will establish a cordial relationship between these parties and promote confidence in their business transactions. The management of these plants have been warned as to the requirements of these laws. Where the notices of compliance are ignored the Department will institute legal proceedings. Also where dishonesty is practiced in such plants the offenders will be prosecuted.

BETTER SIRES—BETTER STOCK

Better Sires Not Merely Purebred

The "Better Sires—Better Stock" movement is more than a campaign for purebred sires, according to the United States Department of Agricultural officials. It is a better sires effort, which means that, in addition to the elimination of the scrub and grade sires, purebred sires must be of good quality. The slogan "Better Sires—Better Stock" urges not only purebred sires but good purebreds.

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Application for entry as second class matter is pending.

Editorial

In these days of high costs of production, milk producers are wondering where they are going to get off at the present prices they obtain for milk.

At the same time consumers are clamoring for lower prices of food elements.

While it is true that milk may be produced at lower cost in summer when extensive pasture is available, there is comparatively little purely pasture made milk. Rations are almost generally supplemented with grain feeds. In many cases indeed, cows get no pasture worth mentioning, being entirely fed with roughage and grain, their presence in the meadows being more for exercise than the subsistence they get.

All in all, the cost of production of milk is advancing rather than receding and this applies to summer as well as winter made milk.

One of the largest factors entering into an adequate price for milk is the irregularity of the supply. Supply and demand are prime factors in arriving at prices paid the producer as well as the price the retailer is asked to pay.

To the producer and seller of whole market milk the prices paid in adjoining territory have a strong bearing on the situation. Higher prices in one section attract milk from those in which lower prices are paid. Efforts to avoid this have been made by trying to keep prices in a fairly uniform basis in adjoining territory.

In arriving at prices in the Philadelphia market those paid in New York and Pittsburgh markets have been taken into consideration.

Conferences between producers, dealers and the public, the latter being represented by Dr. Clyde L. King, State Milk Arbitrator, have been called by the officers of the Inter-State Milk Producers Association to review the matter of prices paid milk producers, which they feel should be higher.

In considering the various phases of this question it was shown that at the prices paid producers in the Philadelphia milk shed, so far this year, they have been paid—taking the weighted average of basic and surplus—on practically an

even basis with the average prices paid producers in the New York and Pittsburgh territory, and all the districts were equally effected by high labor and feeding costs.

In view of the heavy surplus production, which will no doubt be maintained through July, there was little inducement to get more money for the producer although prospects favor such a move in the very near future.

Manufacturers of milk products, such as condensed milk, butter, etc., were particularly unfavorable to advances in milk prices at this time, particularly when lower prices are paid in other districts and they have to meet the competition from these lower price markets in selling their products.

The officers of the Inter-State Milk Producers Association are still contending for a living price for milk but believe that a constructive policy will yield better results than a destructive one and are therefore willing to move slowly. In the meantime the price basis for basic milk in July remains the same as that paid for June.

Every dairy farmer should make the best effort to make clean, sanitary milk. With the more and more drastic conditions imposed by Boards of Health, relative to the condition of milk sold for public consumption, sellers find it more and more difficult to meet the requirements with the wide variation in the condition of the milk offered by the producer.

In some States the production of milk and the method of handling the milk on the farm is prescribed by law. This is generally termed the "barn score" and farmers not conforming with the necessary regulations are docked in the price paid for milk. Inspectors visit the farms and penalize producers for any failures to conform with the regulations.

We can prevent the application of the "Barn Score" by more careful attention in the production of milk under sanitary conditions, to keep milk cool, clean and free from contamination.

Think this over—then correct any unsanitary conditions around your milking stables.

EQUALIZE YOUR MILK PRODUCTION

That time honored bugaboo of the dairy industry—surplus—comes to the front with all possible force at this season of the year.

From actual figures, for the first time available, we are able to give some actual idea of the amount of surplus milk coming into the Philadelphia market. While this information is by no means complete, due to the fact that it is not possible to get actual statistics from the small dealers, who are in the habit of having their dairymen hold back some milk when the supply gets too heavy for them, it nevertheless shows the direction in which the wind is blowing.

Official figures, filed under State regulations comprising reports from a number of the larger dealers in this market, covering the first five months of the year, show the total amount of milk received by those reporting to have aggregated 138,545,556 pounds amounting to an expenditure of \$4,847,980, the average price being \$3.49 per hundred weight. Surplus aggregated 33,609,422 pounds of the total weight, that is, rep-

resented the excess in shipments beyond the basic or average amount received during the months of October, November and December of the previous year. This surplus represents approximately 25 per cent. of the total amount of milk received by the dealers reporting.

How this surplus has increased since the first of the year is shown by the following tabulated record of receipts from month to month.

	Total lbs.	Surplus
January	19,139,547	3,631,261
February	19,909,105	4,285,799
March	20,482,806	6,346,028
April	20,196,584	6,712,848
May	25,215,072	12,631,506

In the month of May an increase of 10 per cent. of the basic quantity is allowed under the present Philadelphia selling plan. Had this not been in working force the actual surplus in that month would have been 10 per cent. higher.

It is to be noted that in January and February the percentage of surplus approximated 16 and 18 per cent. respectively and that it gradually advanced until it reached over 33 1/3 per cent. in the month of May.

Prior to the adoption of the Philadelphia selling plan, it was just this variation in surplus that was the principal factor in fluctuating prices.

These statistics go a long way toward proving the contention of the Inter-State Milk Producers Association in favor of a more even distribution of the milk supply.

The remedy is in the hands of the milk producer. During the fall and winter months there is usually a shortage in the supply of milk. In the spring and early summer comes the surplus. If dairy farmers gave more attention to the regulation of the freshening of their herds a greater uniformity in the supply of milk would result and the situation adjust itself accordingly. It is fully realized that this reversal in the old practice followed by a large number of farmers is not an easy proposition, but it can and should be done if the dairy business is to be placed on a satisfactory basis.

THE BALTIMORE MARKET CONDITIONS

At the monthly price conference held in Baltimore on June 29th, it was decided that the present prices for milk, namely, thirty-seven cents (37c), per gallon for 4% milk, with the usual differential of 4c per gallon above and below 4%, be continued; also that the surplus price of six cents, (6c) per gallon less than the regular price for the amount (plus 10%), shipped during the four fall months, be continued for a time at least.

We believe if the present weather continues the surplus will be used up in a short time, and the surplus price discontinued, as it was agreed that a price conference would be called whenever market conditions warranted.

A very close working arrangement with the milk distributors has been entered into whereby all milk produced by the members of this association will be purchased at market prices, several of the larger dealers agreeing to buy all their supply through this organization. We have also made arrangements with a

(Continued on page eleven)

A TROUBLE MAKER IN DAIRY INDUSTRY

The Inter-State Milk Producers Association has a definite policy of business co-operation with milk buyers in this territory. It is only in rare instances that this co-operation has been denied. We intend to inform our producers from time to time of milk purchasers who are unwilling to co-operate with their producers.

The first man to refuse to co-operate was Mr. H. N. Forrey, York Sanitary Milk Company, York, Pa. Mr. Forrey without any consultation with his producers or without any consultation with anyone representing his producers sent out a price that his producers would have to accept for March. He has repeated this every month since.

Our organization has adopted the policy of asking for arbitration in matters of dispute before we stop shipping milk. We believe the strike should be used only as a last resort. Mr. Forrey accepted arbitration and Dr. King was called in. After Dr. King made his decision, Mr. Forrey refused to accept the decision.

The decision of Dr. King was simply that the price agreed on in the Philadelphia territory was eminently fair to manufacturers and milk distributors; that other manufacturers were paying it and making profits and there was no reason whatsoever why Mr. Forrey should not pay and still make a good profit. Dr. King further stated that if either side were dissatisfied with his decision, an appeal could be made to a committee of two manufacturers and two farmers, one representing the local producers and one representing the Inter-State Milk Producers Association. This appeal Mr. Forrey also refused to take.

Dr. King has been called in as milk price arbitrator not only in Pennsylvania but in Maryland and many other states. This is the first time either a producer or a dealer in Pennsylvania refused to abide by his rulings. In the meantime, Mr. Forrey goes on, making larger profits at the expense of York county producers. He has been notified that he will be expected to pay back to every member of our organization every cent he owes them. If the territory is thoroughly organized this will be done. Mr. Poorbaugh and others are doing a good job in organizing York county. We hope that every farmer will help.

This is only an example of what would be happening all over the state were milk producers not organized. Already Mr. Forrey has taken through an unfair price of his own making thousands of dollars of money that properly belongs to the farmers of York county. Without organization milk producers would always have to be taking what somebody else wanted them to take. This organization is determined that the milk producers of York county will not suffer in the end.

NEW YORK MARKET

At the conference held in May, the price to be paid producers in the New York shed for July, grade B milk was fixed on the basis of \$2.95 per hundred pounds for 3 per cent. milk in the 200-mile zone, equivalent to \$3.35 for 4 per cent. butter fat milk. This represents an advance of 12 cents per hundred pounds over the June price.

THE FOOD VALUE OF MILK

Educational Campaign Under Way

For two years past the Inter-State Milk Producers' Association has carried on a quiet, but persistent educational campaign, emphasizing the food value of milk. This work was actively started in February, 1918, in connection with the Pennsylvania Food Administration and has since been supported by the Inter-State Milk Producers' Association, with the co-operation of the Philadelphia Milk Exchange and under the approval of Dr. Clyde L. King, milk arbitrator for the State of Pennsylvania, under appointment by Governor W. C. Sproul.

Plans were made, not only to reach the consuming public in the cities through direct talks, but to provide correct and up-to-date information on milk and dairy products for the use of teachers in schools and for others who were in a position to give instruction on food, health and diet.

A series of lantern slides were prepared giving the story of milk from the time it leaves the farm until it reaches the city consumer. Another series was on the subject "How a large city gets its milk." These illustrations were used as a basis of two lectures, one for younger children, the other for older children and mothers.

These lectures with complete sets of lantern slides have been presented to the library of the Philadelphia Schools, and to the Trenton Museum, Trenton, New Jersey, for the use in the schools in those cities. The Commercial Museum, Philadelphia, was also furnished with a lecture on dairy matters, including 65 lantern slides. These may be secured free of charge, for public use by any responsible person in Pennsylvania and lantern and screen will also be furnished, if desired. This set includes slides showing dairy views in other countries illustrating how to obtain and distribute their supplies of milk.

Duplicate lantern slides and copies of the lectures are maintained at the office of the Inter-State Milk Producers Association. Also other views on farm practice and production, of particular interest to milk producers. Among these are reproductions of charts, showing variations in production and prices as well as milk consumption in Philadelphia. A lantern suitable for use with electricity or acetylene from gas tanks, is available for use. With this equipment it is possible to present a most entertaining and instructive story on the milk industry and its relation and value as a food supply.

Mr. Newton S. Gottshall, one of the field men connected with the association, used these slides in an organization campaign in Perry county, Pennsylvania, recently, with great success. The have also been shown by Mr. Gottshall and Mr. Robert Brinton at Farmers Institute meetings in Chester county, Pennsylvania. Officers of the various locals should keep these lantern slides in mind when planning neighborhood meetings. They can be used to good advantage.

In Philadelphia and at nearby points, Miss Ellen S. Brinton, who has had charge of the educational work, has made a number of addresses. One of the most recent was at the Brooks School, in West Philadelphia. The reproduction (Continued on page 7)

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS

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F. P. Weaver, Asst. State Leader of County Agents, State College, Pa., attended the regular monthly meeting of the Chester County Farm Bureau Executive Committee, held at the Farm Bureau Headquarters, 28 West Market Street, Tuesday evening, June 8th.

The meeting was presided over by President J. H. Halderman, Pottstown, Pa., and the following members were in attendance: Vice-president, Charles J. Garrett; secretary, Phillip Price; treasurer, Isaac A. Passmore; Roland Smedley, all of West Chester, R. D.; Joseph Phipps, Uxwchland; J. C. Ottenkirk, Honeybrook; G. Walter Sharpless, Toughkenamon, and Prof. Thomas A. Bock, West Chester. Mr. M. L. Jones, Westtown and Horace Sinclair, Sr., Kennett Square were present as visitors.



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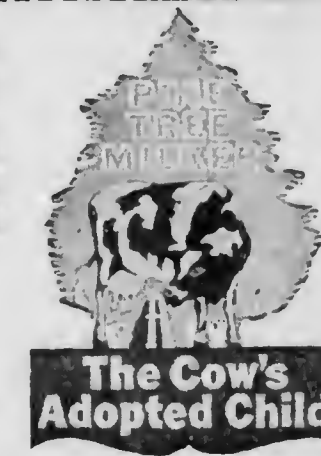
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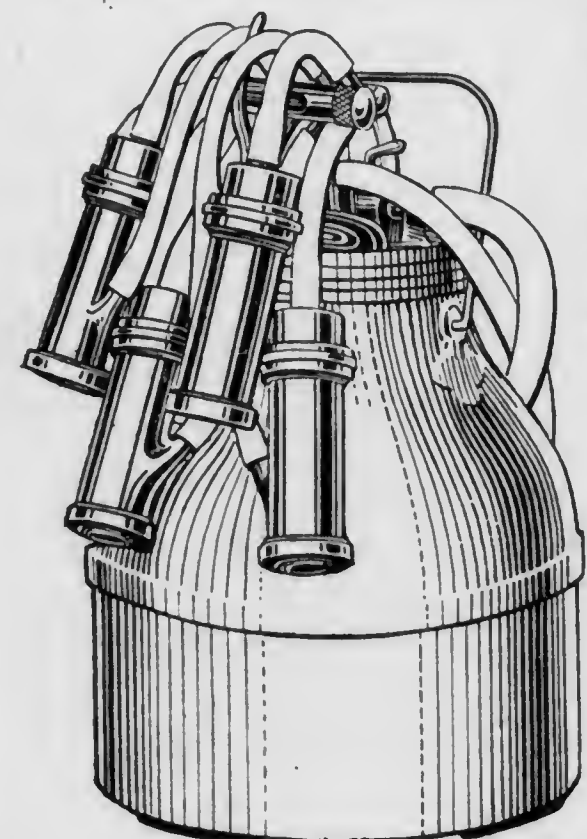
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MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS

BUTCHER THE SCRUB

By R. R. WELSH

Dairy Husbandry Extension, State College, Pa.

The milk supply at the present time is larger than the market demands. The price of milk is low, but feed prices are still high. Children in Europe are undernourished for the lack of milk. Yet the exportation of American dairy products has been greatly reduced. The value of European money is low, much below the value of our own money. So we can not hope for an outlet for our surplus dairy products through foreign channels until somewhat more normal conditions return. It is therefore important that an especial effort be made to increase the demand for dairy products in this country, by educating the consumer as to the great food value of milk, and the importance of it in the diet. This, however, will be a slow process. There is a solution to this surplus milk problem. As in most all agricultural problems, the solution lies with the farmer. The scrub cow, the unprofitable brute, is producing the surplus. She is the trouble maker, cull her out of the herd, send her to the butcher, and the surplus will be no more. Each individual scrub does not produce very much, but the "combined dribbles" from all the scrubs produce the real surplus. The need for the elimination of the low producing and unprofitable cow is greater now than it has ever been. Now is the opportune time to butcher the scrub.

Unfortunately, we can not cull the dairy herd as easily as the poultry man culls his flock. He can pick out the unprofitable hens by observing their outward appearance, but the dairyman must keep a production record of each cow in his herd in order to find the "loafers."

The cow-testing association furnishes the dairyman with a very practical means for obtaining records of the cows. There are now sixty-eight cow-testing associations in this state, with about 25,000 cows on test. Last year over 1300 unprofitable cows were sold from herds in the cow-testing associations. The elimination of the low producing cow is having an effect on raising the average production and profit per cow in the association herds.

It is not only important that the low producing cow be eliminated, but the best cows should be bred to purebred sires of meritorious breeding, and the heifer offsprings well raised to replace the less unprofitable animals. It is indeed important to eliminate the scrub sire. The co-operative bull association is making it possible for many farmers in this state to use sires from outstanding, high producing ancestry at a very low cost. There are twenty-two co-operative bull associations in Pennsylvania, with 102 sires, ranging in value from \$275.00 to \$2,500.00 each.

MANY OLEO LICENSES

The Bureau of Foods, Pennsylvania Department of Agriculture, has issued 5468 oleomargarine licenses since the first of the present year. This is but 320 less than were issued during the entire year of 1919. Of the number issued so far this year, 125 were taken out by boarding house keepers and six by restaurants.

Read the advertisements—keep posted on money saving propositions.

A FEW WAYS OF PROTECTING STOCK FROM STABLE FLIES

The importance of taking steps to prevent the breeding of stable flies rather than depending on protection of the stock, when the flies are full-grown, can not be emphasized too much. However, where this is not done the farmer is forced to resort to various means of warding off the flies.

Work animals may be protected largely from the pest by means of coverings. One type of covering which has been found to be very effective and inexpensive, consists of a blanket made of double thickness of burlap, so arranged as to cover completely the back, sides and neck of the animal. The legs also are covered sometimes by means of old trousers slipped over the feet and tied over the back. Leather nets or strips of leather attached to the bridle also aid in keeping the flies from the head. The ordinary fly net has been found to be of little value, as it only tends to displace the flies temporarily and cause them to settle in places not covered by the net.

Completely darkened stables offer much protection from the flies, although the resulting lack of ventilation is objectionable. The thorough screening of all windows and doors is much more desirable. When screened barns are used, care should be taken to brush the flies from the animals, when they are about to enter, by means of nets over the doorway or with sacks.

On hog farms a freshly plowed trench offers considerable protection to the swine. The sides of these trenches may be smeared with petroleum, which rubs off on the animals and acts as a repellent. The trench may be used also for protecting sheep, but the petroleum in their case is unnecessary.

Write the United States Department of Agriculture, Washington, D. C., for Farmers' Bulletin 1097, free upon request.

New York State Orders "T" Brand for Tuberculosis Cattle

By a recent order of the New York Commissioners of Agriculture, all practicing veterinarians in that state are required to brand cattle found by them to be affected with tuberculosis. The order specifies that the brand shall be the letter "T" not less than 2 nor more than 3 inches high, and on the left jaw.

The new regulation which became effective several months ago, was issued by Commissioner Charles S. Wilson, under authority of the Agricultural Law. The order applies to all bovine animals within the limits of the state. Veterinary experts of the United States Department of Agriculture consider it will be of great value to live stock breeders in New York, and also an important step for any state to take in the progress of tuberculosis eradication. Reactors are permanently marked by the branding process and in cases where they are not slaughtered the possibility of their being disposed of or losing their identity is greatly eliminated, if not eradicated.

DEFINITION OF A "RUBE"

Say—I found out what a "Rube" was the other day.

Have?

Yes—One of those forty hour, nine dollars a day, forty-five dollars a week guys that thinks a farmer ought to sell him milk at six cents a quart.

Work of the Cow-Testing Associations for the Month of May

Avondale-West Grove Association, J. B. Vollmer, Tester.

Although no extraordinary records have been made during the past month, there was a higher average production. The effect of pasturing has been twofold; an increased production at a decreased cost.

555 cows were tested in May and 47 of those made 1200 lbs. milk or 40 lbs. of butterfat. Two herds have averaged 30 lbs. of milk daily for the month. The four highest cows are as follows:

	pounds milk	lbs. fat	but. fat
Dr. W. B. Ewing	H. G. 1643	62.4	
D. D. Bettinger	G. G. 1132	61.1	
E. B. Sharpless	G. G. 1054	61.1	
J. M. Hutchinson	R. H. 1240	59.5	

June 30th will conclude a full year's work for the association and yearly production figures can then be presented.

Northeastern Cow Testing Association, centering in the neighborhood of Kimberton and Spring City, Stanley C. Oliver Tester.

Total number of cows tested, 389. Following is a list of highest producers in the association for the month:

	lbs. milk	p.c. fat	lbs. but. fat
I. I. Wells	.....G. 840	5.00	42.00
C. Christman	...G.H. 1170	4.20	49.14
L. Latschar	...H. 1206	2.90	34.47
Milton Mower	...G.H. 1077	3.80	40.92
H. Bronson	...G.H. 1515	2.70	40.90
H. Bronson	...G.H. 1035	4.00	41.40
W. Styer & Son H.	1605	3.30	52.96
Detwiler & Son G. G.	990	5.10	50.29
Clarence Funk	...G.H. 1188	3.60	42.77
W. Yeager	...G.H. 1164	4.00	46.56
W. Yeager	...G. 894	5.60	50.06

Eastern Pa. State Institution ...H. 1248 3.00 37.44

Eastern Pa. State Institution ...H. 1182 3.50 41.37

West Chester Cow-Testing Association, Miss Mrytle Barger, Tester. Number of cows tested during month, 574. Number of cows producing over 40 lbs. fat, 115; number producing over 50 lbs. fat, 35. List of quality cows is as follows:

	lbs. milk	p.c. fat	lbs. but. fat
Greystone J. Farm J.	1385.7	6.0	83.1
F. C. Brinton, Jr. H.	2170.0	3.7	80.3
Greystone J. Farm J.	1143.9	6.6	75.5
Greystone J. Farm J.	1230.7	6.0	73.8
Greystone J. Farm J.	740.9	8.9	65.9
Thomas D. Wood H.	1875.5	3.5	65.6
West. Bdg. School G. A.	1367.1	4.8	65.6
West. Bdg. School A.	1491.1	4.3	64.1
High. Fms Dairy J.	1178.0	5.3	62.4
Thomas D. Wood H.	1937.5	3.2	62.0

Take Care of Summer Milk

The season of sour milk has arrived, and it will cost the country a great deal of money between now and frost. Milk sours, and the family can not use it. Milk goes to cheese factory too sour to make good cheese. In either case, the dairyman loses the price of the milk, and the country loses that much good food.

The remedy is ice and steam, say dairy specialists of the United States Department of Agriculture. Keep the milk clean and cool. Sterilize all the utensils. If you can not get ice, use the coldest water available in the tanks in which the cans of milk are kept. If steam is not available, do the best you can with boiling water. See the county agent, or write to the United States Department of Agriculture at Washington, for information on how to do it.

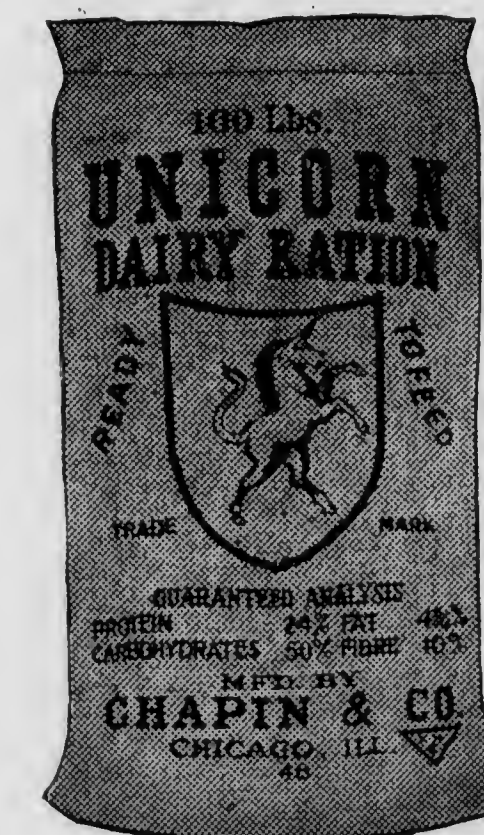
Lower Your Milk Production Cost

Right now, more than ever before, you are forced to hold down the cost of milk production, or work without profit.

A quality feed, Unicorn Dairy Ration, will help you do this.

Quality in Unicorn means two things:

1. Using only the best feeds obtainable.
2. Putting them together the right way.



Our booklets show you how to feed Unicorn the right way—how to cut the cost by feeding less.

Everywhere, the "high men" in cow testing associations, who make the largest net profit, are Unicorn feeders.

Dairymen have cut their grain bills ten per cent and more by feeding Unicorn.

You cannot say that your production cost has touched bottom until you have fed Unicorn.

CHAPIN & COMPANY, Chicago

THE FOOD VALUE OF MILK

(Continued from page 5)

on the front page, this issue, illustrates the field covered in that instance. The girls in the class shown are between 14 and 16 years of age, working regularly in factories of various kinds and under the state laws are compelled to attend school at least two half days each week, during the school term. Recent investigation has shown some of these pupils to be as much as 15 lbs. under normal weight. It was shown that coffee and tea were the common drinks and frequently pretzels the daily lunch. At this talk each girl was given a pint bottle of milk, through the courtesy of one of the large Philadelphia dealers, straws being provided to drink the milk from the bottles. It was interesting to note that even those to whom milk was distasteful, managed to drink their pint of milk and in some cases the girls eagerly consumed two pints.

Subsequent investigation, a week later, showed that the girls had been consum-

Place your order with your dealer for

LEWIS

LINSEED OIL CAKE—in 300 lb. Bags

or LINSEED CAKE MEAL—in 100 lb. Bags

These foodstuffs are made right in Philadelphia so that your dealer receives his shipments without the transportation delays which occur on shipments from the Middle West.

Ask the farmer whose cattle eat Lewis Feed

JOHN T. LEWIS & BRO. COMPANY

705 LAFAYETTE BLDG.

PHILADELPHIA

ing more milk. In many cases milk had supplanted the usual tea and coffee for breakfast. In instances increases in weight under this milk diet were noted.

The Inter-State Milk Producers' Association has also entered the advertising field through the Philadelphia newspapers.

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS



The Old Reliable

Mr. Dairyman, do you know that SCHUMACHER FEED, the old reliable—is an ideal feed for hogs, horses and cattle and young stock, and far cheaper than corn or oats?

Nearly everyone knows that SCHUMACHER FEED, as the carbohydrate part of the dairy ration, has more World's Champion Milk and Butter records to its credit than any other feed, but many stock owners are not aware that it is also an ideal feed for Hogs, Horses and all young stock.

The advantage of having one feed that is suitable for ALL STOCK, is a feature which will appeal strongly to the busy farmer.

SCHUMACHER

SCHUMACHER FEED is composed principally of linseed meal and specially selected by-products of corn, oats, wheat and barley, correctly balanced, finely ground and kiln-dried.

It is the ideal growing and developing feed for hogs. Hog growers who feed SCHUMACHER will get bigger and faster gains at considerably less feeding cost. The palatable flavor and high nutritive value promote big, stretchy frames and rapid growth.

SCHUMACHER is eaten with relish by horses and easily digested. It supplies the necessary stamina to enable your horses to stand up under heavy work without losing flesh.

SCHUMACHER FEED when fed to young growing cattle will prove to be the same profitable, result-producing feed as it does when used as a carbohydrate feed for dairy cows. It develops bigger bone, frame and vigorous body growth.

Schumacher Feed and Big "Q" Dairy Ration makes the ideal combination for dairy cows. Schumacher Feed supplies the maintenance requirements, while Big "Q" being a high quality protein ration is a wonderful milk producer—ready to feed combination that insures maximum production and the best of health conditions. At dealers, if yours can't supply you, write us.

The Quaker Oats Company
Address, Chicago, U.S.A.

Prest-O-Lite

STORAGE BATTERY SERVICE

Prest-O-Lite Service Prevents Costly Repair Bills
YOUR storage battery should be tested regularly. Perhaps it needs repairing—who can tell? There's one sure way to find out.

Call and let us test your battery today. Should a test indicate the necessity for repairs, we have a service battery for you to use while the work is being done. You have the continuous use of your car. When your battery is ready we will notify you promptly. You will be agreeable surprised at the moderation of our charges in these days of high prices.

Pusey-Young Storage Battery Station
117 W. MARKET ST. WEST CHESTER, PA.
COATESVILLE, PA. FELS GARAGE, BERWYN, PA.

THE DAIRY LABORATORIES

5 North 20th Street, Philadelphia, Pa.

Consulting and Analytical Chemists
Complete Chemical and Bacteriological Analysis of Milk, Dairy Products, Foods and Waters

FLY SPRAY TO KEEP FLIES OFF DAIRY CATTLE

Chlorine Solution to Sterilize Milk Utensils Write for information
Dr. Lee H. P. Maynard, Milk Expert H. C. Campbell, B.S., M.D., Ph.D., Chemist
Dr. H. S. Johnson, Bacteriologist Ralph Fox, Assistant
Branches at Washington, D.C. Pittsburgh, Pa. Baltimore, M.D. St. Louis, Mo.

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS

GREEN MOUNTAIN SILOS

The Green Mountain silo with the new hip roof does credit to any group of farm buildings, no matter how pretentious. With its nut-brown creosoted staves and bright red cedar shingled roof, it is a beauty.

Just as good as it is good looking, too. Each part that has to stand a strain and in a silo that means almost every part is built extra staunch and heavy.

Green Mountain staves are of extra-heavy, clean, well-fitted lumber—creosoted to weather-proof and preserve the wood. The hoops are of extra-heavy steel with easy-fitting, rolled (not cut) threads.

The safe-like Green Mountain door is a patented feature that insures sweet silage. The Green Mountain anchorage system prevents warping and blowing over and holds rigid against unusual strains.

No iron parts on the Green Mountain ladder to frost your hands or pull off your mittens in winter. There's a real reason for every Green Mountain feature. Write for free 1920 literature and get the whole story.

CREAMERY PACKAGE MFG., CO.
335 West St. Rutland, Vt.

Hoops and Lugs Extra Heavy

PHILADELPHIA SILOS

The Silo with the BEVELED DOORS
Strong Hoops
Selected Material
Opening Roofs

Ensilage Cutters
Wood Tanks
Steel Towers
Ensilage Trucks
Write for prices and Catalogue

E. F. Schlichter Co.
10 S. 18th St.
Factory NORRISTOWN, PA. PHILADELPHIA, PA.

STEWARTSVILLE LOCAL

The Stewartsville Local held a meeting at Stewartsville, N. J., on May 11th, for the election of officers and general business. Frank H. Castner was elected president and George B. Phillips, secretary-treasurer. A general discussion for the betterment of the local was held. Frederick Shangles spoke on organization work. It developed that there was a lack of uniformity in prices paid for milk by various dealers in Easton, Pa. and Phillipsburg, N. J. This condition is not satisfactory and a strong effort will be made in the near future to get the dealers in the territory named on a more uniform basis.

FARM BUREAU NOTES

The matters that commanded the chief attention of the committee included a discussion relative to procedure in a county-wide survey of all classes and breeds of livestock, to be conducted in co-operation with the State Department of Agriculture and the Pennsylvania State College. The information to be obtained through this survey will serve as a basis for definite work along the livestock improvement lines; the matter of Farm Bureau organization on a membership basis as well as the important question of Farm Bureau Federation, were considered.

Messrs. J. H. Halderman and J. C. Ottenkirch, were selected to represent the bureau at a conference of Farm Bureau officials from every county in the State to be held at State College during Farmers' Week, June 22-24th, at which gathering important questions relative to Farm Bureau organization will be considered and most likely definitely acted upon.

Mr. Weaver, having spent the afternoon in an official visit with the County Agent, prepared a chart analysis of the work in the county, from which he indicated to the committee just how the Farm Bureau activities were distributed over the county by communities and what specific objects were being accomplished. Furthermore, he showed just how little some communities are being reached and urged that more detailed community organization be affected in those sections and definite goals of work set to be accomplished. His talk was most interesting and instructive and gave the committee a broader view of the scope of work to be accomplished and the responsibility to be assumed by local project leaders on the one hand, and the County Agent, who must multiply his efforts in every section of the county, on the other.

KEEP MARKET MILK COOL

Generally, the larger number of bacteria found in market milk when it reaches the consumer are due more to the multiplication of the bacteria than to original contamination. This great multiplication occurs because the milk is not properly cooled during storage, transportation and delivery. Just now this fact is of particular importance to the person having milk to sell, because of the hot weather.

Commercial experience confirms the results of experimental work. Milk which has been held for several hours without proper cooling nearly always shows higher counts than fresh milk from the same source. At a certain creamery, milk received in the morning consisted of the previous night's milk and morning's milk kept separate. During the six summer months, from April to September, inclusive, 478 samples of the morning's milk showed an average bacterial count of 800,026, while 366 samples of the milk which had been held over night on the farms had an average bacterial content of 2,406,357 bacteria per cubic centimeter.

START THE HOME CANNERY

Home canning at its best provides a supply of every fruit and vegetable that has been in season during the summer for use in winter. If only small quantities, enough to serve once a week during the cold months are put up, they will add variety to the menus during the winter.

LATEST MARKET PRICES

PHILADELPHIA MILK PRICES
JULY, 1920
Subject to change whenever warranted by market conditions

Test	Price	Basic	Price for all
Per cent.	per 100 lbs.	Quantity	milk above
3.1	\$3.74	8.1	6.2
3.2	3.78	8.2	6.3
3.3	3.82	8.3	6.4
3.4	3.86	8.4	6.5
3.5	3.90	8.5	6.6
3.6	3.94	8.6	6.7
3.7	3.98	8.7	6.8
3.8	4.02	8.8	6.9
3.9	4.06	8.9	7.0
4.0	4.10	9.0	7.1
4.1	4.14	9.1	7.2
4.2	4.18	9.2	7.3
4.3	4.22	9.3	7.4
4.4	4.26	9.4	7.5
4.5	4.30	9.5	7.6
4.6	4.34	9.6	7.7
4.7	4.38	9.7	7.8
4.8	4.42	9.8	7.9
4.9	4.46	9.9	8.0
5.0	4.50	10.0	8.1

When milk is not tested the price f. o. b. Philadelphia is 9 cents per quart.

RECEIVING STATION PRICES
Loss Freight and Receiving Station charges

Miles	Test %	Basic	Price for all
per 100 lbs.	per 100 lbs.	Quantity	milk above
1 to 10 incl.	3.1	\$3.28	\$3.30
11 to 20	3.2	3.27	3.29
21 to 30	3.3	3.26	3.28
31 to 40	3.4	3.25	3.27
41 to 50	3.5	3.24	3.26
51 to 60	3.6	3.23	3.25
61 to 70	3.7	3.22	3.24
71 to 80	3.8	3.21	3.23
81 to 90	3.9	3.20	3.22
91 to 100	4.0	3.19	3.21
101 to 110	4.1	3.18	3.20
111 to 120	4.2	3.17	3.19
121 to 130	4.3	3.16	3.18
131 to 140	4.4	3.15	3.17
141 to 150	4.5	3.14	3.16
151 to 160	4.6	3.13	3.15
161 to 170	4.7	3.12	3.14
171 to 180	4.8	3.11	3.13
181 to 190	4.9	3.10	3.12
191 to 200	5.0	3.09	3.11
201 to 210	5.1	3.08	3.10
211 to 220	5.2	3.07	3.09

Freight rates deducted on a basis of 46 quarts—113 per cent. of 40 quarts, plus 3 per cent. war tax.

Prices for milk above basic quantity based on 120 per cent. of the average monthly or semi-monthly price of solid packed 92 score creamery butter, New York City, in May, June and July an increase of 10 per cent. and in August an increase of 5 per cent. in the basic quantity of milk shipped is allowed.

SURPLUS BASIS PRICES

4 per cent. milk at all receiving points	First half	Average
per month	per month	per month
January	\$3.16	\$3.12
February	3.20	3.18
March	3.14	3.19
April	3.38	3.43
May	2.96	3.00
June	2.71	2.76

JUNE COMPARATIVE PRICES PAID

4 per cent. butter fat, per 100 pounds	Basic	Surplus
per 100 pounds	per 100 pounds	per 100 pounds
Philadelphia, 50 mile zone	\$3.61	2.76
New York, 300 mile zone	3.35	
Pittsburgh, outlying points	3.35	
Baltimore, per gallon f. o. b.	.37	.31
Cleveland, per gallon, f. o. b.	.33	

RETAIL MILK PRICES

Subject to Board of Health Regulations	Quarts	Pints
Grade B or Market Milk	per quart	per pint
Philadelphia	14	14
New York	16	16
Pittsburgh	15	15
Baltimore	16	16

MAY BUTTER PRICES

92 score solid packed creamery butter, cents per pound	Phila.	New York	Chicago
1	60	60	53
2	57	56	53
3	55	55	53
4	55 1/2	55	52 1/2-53
5	55 1/2	55	53
6	56	56	53 3/4
7	57	57 1/2	55 1/2
8	58	58 1/2	56 1/2
9	58	58 1/2	56 1/2
10	58	58 1/2	56 1/2
11	58	58 1/2	56 1/2
12	58	58 1/2	56 1/2
13	58	58 1/2	56 1/2
14	58	58 1/2	56 1/2
15	58 1/2	58 1/2	56 1/2
16	58	58	56 1/2
17	58	58	56 1/2
18	58	58	56 1/2
19	58	58	56 1/2
20	58	58	56 1/2
21	59	58 1/2	56
22	59 1/2	58 1/2	56
23	59	58 1/2	56
24	59	58 1/2	56
25	59	58 1/2	56
26	59	59	56
27	59	59	56 1/2
28	59	59	56 1/2
29	59	59	56 1/2
30	59	59	56

PRICES PAID PRODUCERS
f. o. b. dealers station
And retail selling prices, Market Milk, nearby cities and towns

Quarts	Quarts	Pints
per quart	per quart	per pint
Allentown, Pa.	8 1/2	14
Bethlehem, Pa.	8 1/2	14
Camden, N. J.	9	14
Harrisburg, Pa.	8	13
Lancaster, Pa.	7 4/5	12
Norristown, Pa.	8 1/2	14
Princeton, N. J.	8 1/2	14
Pottsville, Pa.	9	14
Reading, Pa.	8 1/3	13
Trenton, N. J.	9	14
Wilmington, Del.	8 1/2	14
West Chester, Pa.	8 1/2	14
York, Pa.	8	13

MILK PRICE SITUATION IN PHILADELPHIA

(Continued from page two)
war debt to producers must be repaid in relative if not actual higher prices in the future.

The milk producer selling on the Philadelphia market has received as high a net annual price as any milk producer in the country and he fared better than did producers of milk, meats and fats generally.

The Milk Dealer's Part
The farmers selling on the Philadelphia milk market have helped to stabilize prices to consumers. But it cannot be said that the favorable retail price in Philadelphia has been at the expense of Philadelphia producers as compared with the prices received by milk producers in other districts, or for the year 1918, as compared with the price level of other commodities.

During the year 1919 the consumer in Philadelphia paid an average of one and one-half cents per quart for each month below the average price paid by consumers in New York City, Pittsburgh and Chicago for pasteurized milk delivered, while the milk dealer in Philadelphia paid as much to the farmer for his milk as did the dealers in these other cities. In other words, Philadelphia milk dealers have received, cooled, pasteurized, bottled and delivered milk at one and one-half cents per quart below the average spread taken for these services, including profits, by the milk dealers in these other cities.

In the period before the war, when milk was selling at eight cents per quart, about four cents per quart of the annual average went to the producer and four cents to the distributor. This was the situation in 1914. By 1919 the farmer was receiving nine cents per quart and the distributor five cents per quart for his services. The price to the producer, that is, had increased 125% while the share taken by the distributor had increased 25%. In other words, out of six cents increase in the price of milk to the consumer in Philadelphia during the war period five cents went to the farmer and one cent to the milk distributor.

Can anyone point to any group of business men, other than Philadelphia milk dealers, who are today performing the same or better service at but 25% increase over the prices charged for those services in 1914? There may be such, but every consumer knows how scarce they are.

By what principles and methods have the dealers in Philadelphia accomplished this result? The following, are among the principles and methods responsible.

(Continued on page ten)

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS

NEPONSET ROOFS



Farmers Have Tested Paroid for 20 Years and More

Proof of wear—that's what most farmers insist on knowing before they buy roofing.

Neponset Paroid, familiarly called "Good Old Paroid," has a wonderful record of protecting cattle, stock, tools, crops, garages, and homes from the attacks of rain and sleet, sun and snow—at lowest service cost per square foot per year.

It is beautiful enough for your house and low enough in price to use on less expensive buildings. Protects your property from fire. Easily laid right over old wooden shingles or on new roof boards. Makes an ideal siding.

THREE COLORS

Impregnated with asphalt and surfaced with slate or tile, Neponset Paroid is water-proof, tough, strong and flexible. Easily laid by anyone. Nails and cement come with each roll. Paroid slate-surfaced comes in two beautiful colors—natural slate-red and slate-green. Paroid gray is an unusually thick, heavy roofing. Its surface is almost white. There's a Neponset Paroid roofing for every need and every purpose. The Neponset dealer in your town can supply your needs. Write us for full information.

BIRD & SON, inc. (Established 1795) East Walpole, Mass.

THE THREE-QUARTER TON INTERNATIONAL

MODEL H

Is the Ideal Farmer's MOTOR TRUCK

It will carry a ton anywhere. It has a speed of 20 miles per hour.

It is built throughout by the International Harvester Co., of America, whose reputation for fair dealing has earned for them one of the largest business in the world today.

Sold in Chester and Delaware counties by

- R. M. Rakestraw..... West Chester, Pa.
- Mercedes Motor Co..... Chester, Pa.
- A. H. Pratt..... Kennett Square, Pa.
- M. C. Walker..... West Grove, Pa.
- S. W. Lee..... Oxford, Pa.
- Willis Gill..... Cochransville, Pa.
- M. D. Smith..... Coatesville, Pa.
- John McGowan & Son..... Downingtown, Pa.
- H. J. Bachman..... Elverson, Pa., R. D.
- Herbert Hansell..... Oakmont, Pa.
- Simmons & Barrow..... Lansdowne, Pa.
- Chas. Wirrillow..... Media, Pa.

See your nearest dealer for demonstration and literature.

For the Silo, Barn,
Wagons, Implements,
etc., Use

NICE Paints

There's a "right" one for your particular purpose. They contain only the purest of leads, oils, zincs and other paint pigments. Made by a house with a reputation for good, honest paint making, covering a period of over 45 years.

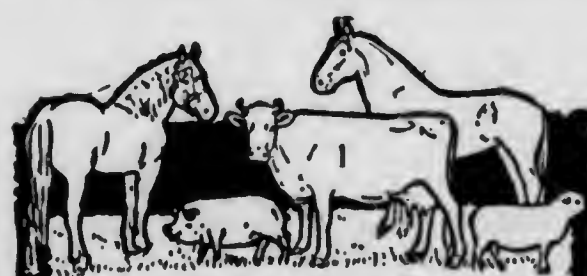
You can't go wrong in selecting any "Nice" products.

WRITE FOR BOOKLET called "Paint Pointers" contains practical, commonsense suggestions.

Helpful to every user of paint.

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EUGENE E. NICE
PHILADELPHIA



Keep Farm Animals Healthy

—full of life and vigor. International Stock Food Tonic helps them to properly digest and assimilate their food. Keeps their blood pure—helps them to avoid disease. The feed saved more than pays for it.

INTERNATIONAL Stock and Veterinary Preparations

—include International Stock Food Tonic, Hog Tonic, Worm Powder, Animal Dip, Pheno (Disinfectant), Colic Medicine, Heave Powder, Distemper Powder, Gall Salve, Poultry Preparations, Silver Pine Healing Oil and many others.

Successful for 30 Years

A steadily increasing demand for over a quarter of a century proves their popularity. There's an International preparation for every farm animal.

Ask Your Dealer

You give your children milk—why neglect yourself?

A glass of milk a day will keep old age away.



Milk Cans and Bottles

Your order solicited for any quantity.

Special low prices on car load shipments

J. S. BIESECKER

CREAMERY DAIRY and DAIRY BARN EQUIPMENT

59 Murray St., New York City



The original ear label, used by many Record Associations and best breeders. Will identify your live stock and aid you in keeping breeding and production records. Samples free.

C. H. DANA CO., 87 Main Street, West Lebanon, N. H.

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS



BENGAL America's Best ONE PIPE FURNACE

No Wall Cutting
No Piping
SAVES MONEY
More Heat Less Fuel

Investigate this proposition
Write for information

Floyd, Wells Co.
ROYERSFORD, PA.

Manufacturers
Heaters, Ranges, Stoves, Etc.

MILK PRICE SITUATION IN PHILADELPHIA

(Continued from page nine)

1. The Philadelphia dealers co-operated with public representatives to keep costs low.

The milk dealers in Philadelphia in fact and spirit purposefully co-operated with the Food Administration to keep both costs and profits down as their bit in aiding war morale.

2. Milk in Philadelphia is sold from the retail wagon.

Over 90% of the milk consumed in Philadelphia, probably 95%, is sold from the retail wagon. The larger the load on the retail wagon and the shorter the haul the lower the delivery cost per quart. Moreover milk in grocery stores cannot be inspected as to adulteration as can milk bottled in a large plant. Bottled milk of responsible dealers must average, and does average, above the legal requirements. No dealer of size could keep a retail bottle trade and water his milk.

3. Wages to milk drivers have been in large part on a commission basis.

The result is that a driver is rewarded in proportion to the work done. The direct labor cost in delivering milk in Philadelphia is below what it is, therefore, in many cities, while the amounts actually earned by Philadelphia milk drivers are as high as elsewhere.

4. The price to the consumer has been stabilized.

This has been possible with the co-operation of the producer, as explained above. The result is that wastes, due to

fluctuations on retail wagons, are eliminated. The demand remains constant and hence many costs found in cities where the price widely fluctuates as between winter and summer have been done away with. Stabilization does not mean the same price in winter as in summer. But it does mean that the winter price is kept as low as is consistent with winter production. Because milk contains certain elements absolutely essential to sound nutrition quite apart from its value as a food as measured in calories it is particularly important that the price of milk in winter be kept as low as is consistent with an assured supply in the country. Hence the policy described above for stabilizing the price to the producer as well as to the consumer.

5. The milk plants in this city are well planned and carefully managed from the viewpoint of low costs.

The costs in these plants in Philadelphia vary materially as between plants and not all are as efficient as the best, and all have possibilities for improvement. But the Philadelphia plant with the highest plant cost is still lower than the lowest plant cost in many another city.

6. The newspapers and representatives of the consumers have co-operated in Philadelphia to maintain and increase milk consumptions just because the price situation has been pre-eminently fair.

Philadelphia is consuming as much milk at 14 cents as at 8 cents per quart.

Milk at 14 cents per quart, under prevailing wages, is much cheaper than it was at 8 cents.

A survey made by representatives of charitable organizations for the Food Administration revealed that the milk consumption in the congested districts had not decreased with the increase in price save in those few groups where wages had not increased.

At 14 cents, or for that matter at 18 cents, milk is the cheapest, as it is the most wholesome of foods. This fact has been reflected in increased consumption.

The result is that producers and dealers have a market and a good will worth money to both, and the consumer gets a vital commodity at prices below those prevailing in other cities.

7. There is less duplication in plants and of retail wagons on the streets in Philadelphia than in most cities.

The savings in large scale plant and distributing facilities account in large part for the fact that the spread to the dealer in Philadelphia has not increased in proportion to other costs. As compared with other cities, the retail loads are larger and routes shorter. There is no section in the city without competition. But in the city as a whole there is less useless duplication in plants and on the streets than in most cities. In many other cities savings, because of a greater amount of duplication on the street, would amount to over one cent per quart.

The Public Representatives

It has been my duty to act as one of the public representatives in milk price matters in Philadelphia, first as chairman of the Governors' Tri State Milk Commission, then, under the Food Administration as Milk Commissioner, and since the armistice as milk price arbitrator for Pennsylvania, appointed by the Governor. What part, if any, public representatives have played during this period it is for others to evaluate. In this work the following principles among others have guided public officials during this period:

1. Full and complete information has been insisted on as a basis for judgments.

To this end the milk distributors in the city have filed and continue to file monthly financial statements. These and other records of these companies have been and are being examined by an accountant paid by the public, working at present under the supervision of and responsible to the milk arbitrator.

2. Policies that increase the loads on and shorten the hauls for retail wagons have been encouraged.

In many cities during the war period all sorts of plans were evolved to save milk distributing costs. These plans took the milk off the retail wagon and hence increased per quart the cost of delivering milk. Philadelphia milk has been delivered, bottled, at below the cash and carry plan for loose dipped milk in New York City in most, if not in all, of the months of the past two years and below any cash and carry plan for bottled or loose milk adopted anywhere.

3. Every effort has been made to keep the market wholesome.

Formulas that arrive at artificial prices to producers have not been used in this district as they have in others. But the need for advancing prices to producers has been squarely met as the best guarantee to consumers of an adequate supply of milk.

4. No attempts have been made to "fix" prices by government agents.

Price conferences have been and are attended by the representatives of the public as well as by representatives of milk producers and milk buyers. In these conferences the interests of all parties including the consumer, are considered, and all agencies, whether they be those of the public, or of producers, or of dealers have been summoned to correct evils and to keep a wholesome price situation.

The Consumer's Part

And finally may I add that the milk price situation in Philadelphia would not be as it is had it not been for the co-operation of the newspapers in Philadelphia and the representatives of women's clubs. Both have joined heartily throughout in acting after knowledge and fairly in the interests of all. The representatives of women's clubs and of charity organizations, and those in charge in the schools, all have done well their share in making and keeping the present price situation what it is. Prices are not the result solely of inexorable laws over which people have no control. Prices

(especially for such a commodity as milk, are affected by public sentiment and good will and the ethical standards and public conscience of those who buy and sell. All these factors have played their part in keeping the milk price situation in the Philadelphia district all that it is.

BALTIMORE MILK CONDITIONS

(Continued from page three)

bonding company to cover all the dealers with whom we place any shippers, beginning July 1, 1920. We do this to protect the farmer that ships to the smaller dealers, and sometimes sells out without paying their shippers.

The consumers organizations have been working with us towards increasing the consumption of milk and dairy products, commencing with putting on a milk show in connection with their annual Flower Mart. The Women's



This Seventeen Year Old Girl Milks Twenty-seven Holsteins with the Perfection

TWENTY-SEVEN cows, especially when some of them give as much as 100 pounds in a day, is quite a bunch for a girl to milk. When Theodore Gillis' 17 year old daughter can handle them all alone with the Perfection, it's not hard to understand why Mr. Gillis thinks his milker is a wonderful machine.

Just Ask Your Neighbors

"We have several other kinds of milking machines in this neighborhood but everyone seems to think the Perfection gives the best results and is the most reliable machine."

Names, Addresses and Catalog Waiting For You

How much would it be worth to you to have your milking problem solved? Find out about the Perfection Milker. We'll gladly send you names and addresses of owners so you can investigate for yourself. Just ask the men who own Perfections what they think of them. We will also send without charge a copy of "What the Dairyman Wants to Know", the book that answers every question about milking machines. Write.

Mr. Gillis has labor problems just like everybody else. And sometimes he's right up against the wall for hired help. But since he has a Perfection, his daughter can always help him out. "The Perfection Milker was rightly named," he says, "for it is a perfect milker and so easy to operate that my daughter, 17 years old, has milked my whole herd of 27 Holstein cows every night during the summer when we were short of help."

The Perfection Gets More Milk

"The Perfection gets more milk than any hand milker can get from my cows. One of my cows, 5 years old, gave as high as 102 pounds of milk in a day. A heifer gave 64 pounds in a day. One of my cows, which had been milked nearly two years without freshening we could not dry up without taking the machine off her."

Perfection Manufacturing Company

2168 E. Hennepin Avenue

Minneapolis, Minn.

The Perfection is the Milker with the Downward Squeeze Like the Calf

PERFECTION MILKER

Shoo-Fly THE 7 ANIMALS' FRIEND

For keeping flies, gnats and many other insects off animals. Used and endorsed since 1885 by leading dairymen. Cows give 25 per cent. to 35 per cent. more milk during fly season if sprayed with Shoo-Fly.

in milk and flesh alone on each cow in a single season. Excellent for galls. Alleviates itching. Aids in healing cuts and sores. Excellent for lice and mites in poultry houses.

Send \$1.50 for enough Shoo-Fly to protect to cows two weeks, also our 3-tube gravity sprayer. Money back if not satisfactory. Name Express Office. Booklet FREE.

Shoo-Fly Mfg. Co., 1346 N. 10th St., Phila.

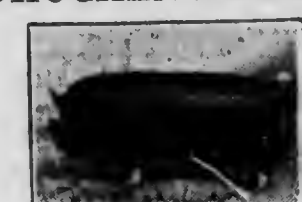
Bags Sacks

We pay 14c each for beet pulp bags. Proportionate prices for other sizes.

Better write for price list NOW

Larimer Bag Co.
WASHINGTON, D. C.

LINGHOCKEN BERKSHIRES



PROLIFIC LARGE SMOOTH rich in the blood of the best Special Attention given to orders for Spring Pigs Write for information F. M. TWINING LINGHOCKEN FARM Pineville, Bucks Co., Penna.

COOLS MILK—IMPROVES QUALITY

STOPS WASTE AND LOSS Removes odors—halts germ growth—insures uniform, better-flavored, long keeping raw material. Insist on the GENUINE IMPROVED CHAMPION Stops waste and loss. Saves its cost in one week. Recommended by leading creameries and producers. If your dealer cannot supply you, write for special offer. Folger Free, Champion Milk Cooler Co., Dept. 22, Cortland, N. Y.

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS

Make It Easy for the Boys

In barns that are James equipped, the work is not too great even for children's strength. JAMES Equipment makes barn work easy.

Cleaning The Barn

The easy running James Carriers turn the disagreeable, dirty task of cleaning out the barn into a near-pleasure. They make a boy's job of what used to be shirked by all—and are an investment that pay profits of 25% or more a year in labor saved.

James Scrapers make quick work of cleaning cement floors; the James Stanchions, with the James Alignment Device, keep the stalls and cows clean, by aligning the cows at the rear, so that manure falls in the gutter and not on the platform.

Feeding The Cows

The easy way of feeding the cows is the Jamesway—the James Feed Truck or Feed Carrier, and James Feed Mangers. Rolling easily along the track or on the cement floor, the James Carrier or Truck make unnecessary the lifting of heavy baskets filled with feed. With their big, roomy tubs they save much walking to and from the feed rooms, and in a short time pay for themselves in labor saved.

Watering The Cows

What a job this used to be in winter time—keeping a fire going in the old time tank heater, or breaking the ice in the tank so that the cows could drink.

And how they hated to drink—with the north wind howling, the snow or sleet driving, and the drinking water icy cold.

No wonder the milk yield dropped in winter time—for feed that should have gone to make the milk was used to warm the cow, and the water needed to make milk was never drunk.

James Drinking Cups have changed all that. A sanitary cup for each cow provides fresh water day and night. It flows in automatically as fast as the cows drink.

Water—the simplest means of increasing milk yields—is often disregarded by dairymen. Those who realize how greatly milk flow is increased by James Cups are reaping huge profits on their investment. Reports based on milk records of 28 herds (739 cows) for instance, show an average increase per cow per day of 2.45 lbs. This is 490 lbs. in 200 days, which at \$3.50 per cwt. totals \$17.15; with a saving of \$2.50 per cow in labor and 55c in fuel. That's a profit of 400% the first year.

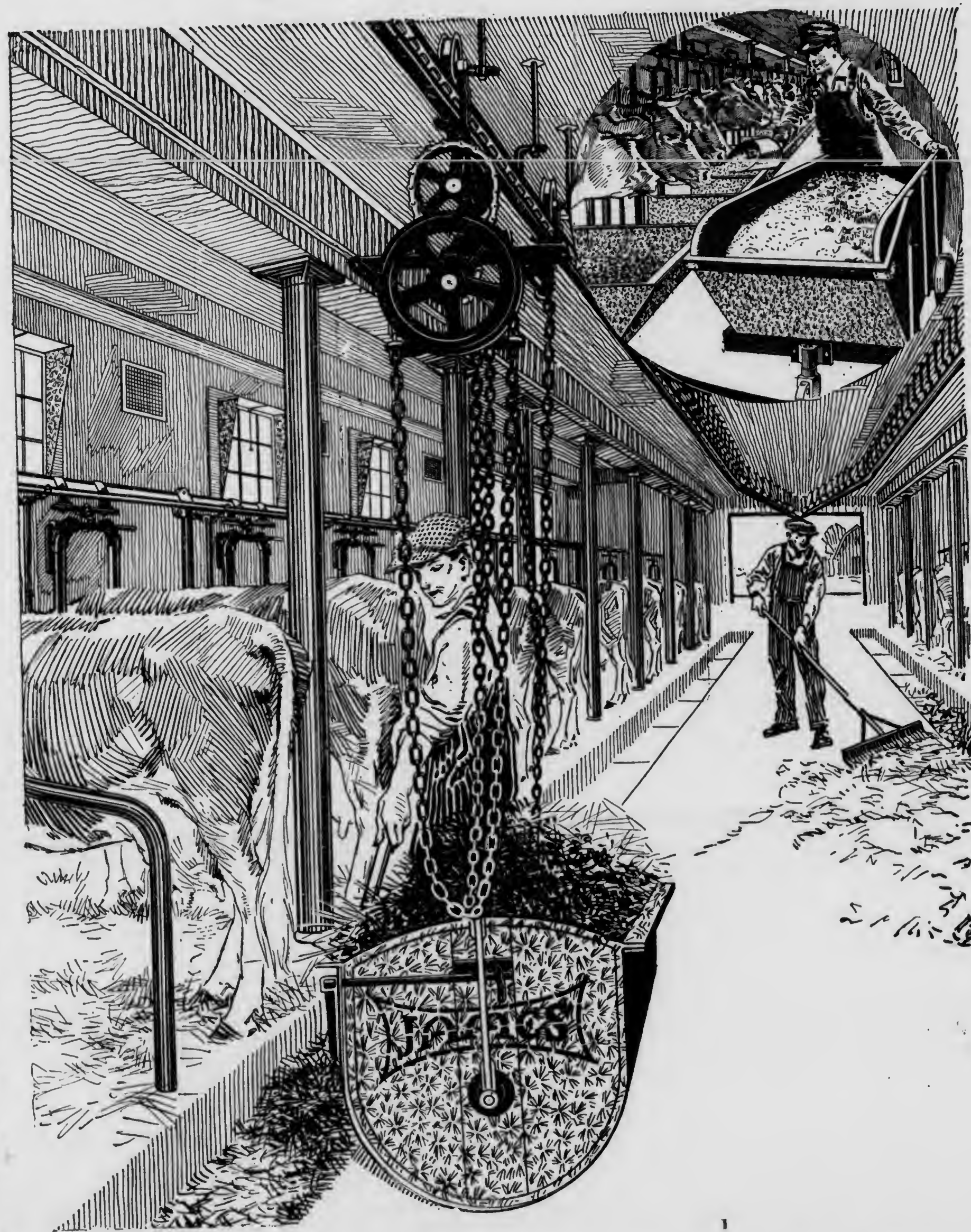
Other reports and other investigations confirm these figures. Ask us for the proof. Then get James Cups busy right away making these big profits for YOU.

"Airing" The Cows

Pure air is just as necessary to life and production of milk as feed and water.

And a cow needs TWICE the weight of AIR per day that she does of feed and water combined.

Do your cows get enough pure, fresh air? Food, water and air. The feed costs money—lots of it. But air are



free—the only expense is getting them to the cow, and that amounts to very little. The James Ventilators help get the foul air out of the barn, help bring the fresh air in to the cows. Ask for full information regarding these wonderful ventilators and about the James Ventilating System.

Other Work-Saving James Devices

There are many other James devices that save labor, increase milk yields, help sanitation and improve cow health, such as Cow, Calf and Bull Pens, Feed Mangers, Calf Pail Holders, Sure-Stop Swingers, Post, Swinging Cranes, "Safety"

First" Bull Staff, Handy Milk Stools, etc. Also equipment for the hog barn, horse barn and beef barn: The James Way Sunny Hog Barn provides sunshine and sun warmth on the floor of every pen two-thirds of the sunlight hours. The James Hog Barn Book, sent on request, tells all about it.

Free Dairy Barn Book

The 336 page book—"The Jamesway"—tells all about the James inventions that save so much of labor, prevent spread of disease, promote better cow health, protect against dangerous bulls, make simpler the care of calves and sick cows, and increase milk yields.

Easy Installation

It explains the easy way of putting up carriers, setting up stalls and pens and attaching drinking cups.

Skilled help is not required, because of the ingenious James Anchors and because the equipment is assembled at the factory.

Barn Plan Service

It tells about James Barn Plan Service; the many James barn experts who are at your service—men who know what has been successful and what has not, what not to do as well as what to do in planning convenient, money-saving barns.

Their advice on barn planning, ventilation and other barn problems is free, with no charge for floor plans. Send for the book—a postal card request will bring it—get the full details of how to build a barn, how to ventilate a barn, how to cut the barn work in half, how to make more milk—and more money.

James Mfg Co. Ft. Atkinson, Wis. Elmira, N.Y. Minneapolis, Minn.

The James way

Labor Saving Equipment for the Dairy Barn

INTER-STATE Milk Producers Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE INTER-STATE MILK PRODUCERS ASSOCIATION, Inc.

VOLUME I

WEST CHESTER, PA., AND PHILADELPHIA, PA., AUGUST, 1920

NUMBER 4

JULY MILK CONDITIONS

Approximating Normal

Milk receipts in Philadelphia during July showed but little variation as compared with the previous month. Weather conditions have, as a rule, been favorable for production. In most sections open pasture conditions have been good and flies have not been excessively troublesome.

The quality of the milk coming into the city has been up to the average, although sudden changes in weather conditions have made it more difficult to keep milk from souring in transit. While some producers have had more or less trouble in this direction, it is one that must be handled by the individual producer. Cleanliness is the prime factor in this connection.

Consumption in the Philadelphia market has been increasing. More milk has been used for manufacturing purposes, particularly ice cream and there has probably been some increase in domestic consumption, particularly in that the supply of sugar has become better and prices have a downward tendency.

Taken on the whole there has been a decrease in the supply of surplus milk on the various receiving platforms in the city, particularly toward the close of the month.

Early in July surplus milk sold down to six cents a quart. In a few days when there was an unusual restriction a premium was paid but during the latter part of the month prices were pretty well held at the established basis. Conditions of supply and demand, together with higher costs of production have been shaping themselves toward the advance in prices, which became effective on August 1st, and which are covered in detail in another column.

The butter market while fairly stationary in price during July, shows a slight average decline in price as compared to June. There has been an un-

interrupted movement in butter from the large producing districts to the various markets. Importations have also been in good volume and have had a considerable bearing on prices.

During July, the average price for 92 score, solid packed creamery butter was 57.1 cents, as compared to 57.5 cents in June. Computed on 120 per cent. of

AUGUST MILK PRICES

Flat Increase of One Cent Per Quart

The officers and executive committee, under the direction of the board of directors of the Inter-State Milk Producers Assn. have had repeated conferences with manufacturers, dealers, representatives of the public, including Dr. Clyde L. King, Milk Price Arbitrator and Frank B. McLain, Public Welfare Commissioner for the State of Pennsylvania.

per day, including board. Now the minimum is \$4.00 per day. In other sections wages in 1919 ranged from \$50 to \$100 a month and board. For the same class of labor farmers are now paying from \$65 to \$120 per month.

Estimates show labor costs to have increased on the average, fully 25 per cent. and the class of labor obtainable is far less efficient in general than that previously employed.

Contraverting these facts it was noted that there was a disposition to work the cost of living downward rather than upward and that the supply of milk was not particularly excessive at this time.

At the same time producers, under present prices, were not getting a new dollar back for an old one and unless some inducements were made in view of present costs, the supply of milk would likely not be sufficient to meet the demand in the fall months. It was also shown that up to the present time the average weighted price of market milk, paid to producers in this section equalled the average price paid to producers in neighboring territories, but advances in other districts, at the old price basis in this territory, would put them ahead of our prices in August and September.

These conditions were admitted by the public authorities as well as the dealers and manufacturers and it was finally agreed that an advance of one cent a quart or 46 cents a hundred pounds for basic milk should be given the dairy farmer during August and September.

This advance will go to the producer direct. The retail price of milk would be advanced one cent a bottle to the consumer to cover the advance to the dairyman.

What will result later in the year is problematical. We are faced with advances in freight rates and feed prices, later in the year, are to be reckoned with.

Consumption of fluid milk has been increasing. Statistics at this time are not available but from the demand it is evident that more milk is being used in general than was the case a year ago.

(Continued on page five)



The Homestead of F. P. Willis, President, Inter-State Milk Producers Association, at Ward, Delaware County, Pa. (Note Mushroom Houses at the left.)

on this basis, the price for 4 per cent. butter fat milk was \$2.76 per hundred pounds or 7.1 cents a quart, delivered at all receiving stations. This is at the same price basis as for June. The average price for basic milk, so far this year has been \$3.61 per hundred for 4 per cent. milk in the 50 mile zone, while the average price for surplus milk has been \$3.06 per hundred. The weighted average price of basic and surplus milk, received by producers in this territory equalled on August 1st the average price paid producers in the other leading markets in New York and Pennsylvania. Up until July 1st, the average price in this district was slightly in excess of the average prices paid in New York and Pittsburgh territory.

The price of July basic milk was unchanged at \$4.14 per hundred weight for 4 per cent. milk, f. o. b. Philadelphia, and \$3.61 per hundred at receiving stations in the 50 mile zone.

Efforts were made to obtain an advance in the price paid producers to cover the remainder of the year, but in this we were unsuccessful. It was contended that there was too much uncertainty regarding the future, particularly as far as prices of grain, feeds, etc., are concerned.

It was shown that prices of everything connected with the dairying industry had advanced materially in cost over those of 1919. Feed prices show an advance of 20 to 23 per cent. in different sections of the territory. Costs of dairy supplies, milk cans, truckage from the farms to delivery points, all show a substantial advance in costs.

It was shown that labor costs have not only increased but the scarcity of labor has entailed longer and harder working hours for the farmer to meet the requirements necessary to maintain production. In some sections day labor on the farms ranged from \$3.00 to \$3.50

A FARMER'S JERSEY BREAKS WORLD'S RECORD ON FIRST TRIAL

Poppy's Dortha 378520, owned by Frank E. Lynn, of Perrydale, Oregon, has established a new world's record for junior three-year-old Jersey cows by making 17,904 pounds of milk and 994 pounds of butterfat in a year's test, beginning at three years and four months of age.

Mr. Lynn, when asked to make a statement in regard to the methods he used in feeding and caring for this cow while on test, gave an interesting account of the record in these words:

"I was not doing testing when this cow freshened and had no intention of starting her, so she had no grain of any kind for two months before freshening and was not prepared for a test in any way. It was only after she started milking so heavily that I decided to again start testing. Even then I had no idea that she could make a world's record.

"The man who milked and fed her during the first six months had never

who owned a cow that did not appear to be championship material, emphasizes again the fact that appearances are oftentimes deceiving, and that the best way to tell what a cow can do is to put her on official test.

Poppy's Dortha comes by her productiveness through inheritance, as her pedigree shows her to be a granddaughter of Rosaire's Olga Lad, a gold and silver medal bull; and her grandam on her dam's side is St. Mawes Poppy, a cow with three official records of over 700 pounds of fat, the highest of which was 932 pounds fat. In her next generation she reveals the blood of St. Mawes, a gold medal sire. This adds further evidence to the case that great producers reproduce, and offers valuable material to students of dairy cattle breeding.

Besides being the new three-year-old champion, Poppy's Dortha also has won the distinction of having made the fifth highest fat record, the sixth highest milk record of the Jersey breed, and the highest milk record ever made by a Jersey under seven years of age.



milked or fed cows on test. He did not realize the need of regular feeding and milking. Had it not been that Dortha was wise enough to eat only what she wanted, she would have been overfed many times.

"It was only after six months that I realized she really had a chance to make a remarkable record, and she was then fed and milked at regular intervals, although she was not coddled in any way. She never had a blanket on or had her drinking water warmed in the coldest weather.

"Her feed for the last six months of her test was 12 pounds mill run, 9 pounds chopped oats, 6 pounds beet pulp and 3 pounds oil meal. She also had 50 pounds of silage and 30 pounds of kale per day until the first of May, when she was turned on pasture.

"One of the cow's peculiarities is that she knows when she has had enough to eat, and will not take any more feed than is good for her."

This statement coming from the man

Her record by months:

DATE	No. Days	Milk—Lbs.	Per Cent Fat	Fat—Lbs.
June 20-30, 1919	11	613.6	4.59	28.16
July	31	1666.2	4.59	76.48
August	31	1559.0	4.57	71.25
September	30	1419.6	5.38	76.37
October	31	1486.4	5.12	76.10
November	30	1408.4	6.25	88.03
December	31	1438.2	6.47	93.05
January	31	1488.2	6.49	96.58
February	29	1428.5	6.33	90.42
March	31	1479.0	6.08	89.92
April	30	1362.0	6.28	85.53
May	31	1590.0	4.91	78.07
June 1-18, 1920	18	865.0	5.12	44.29
Totals		365 17,904.1		994.25

During her test, the new champion was visited twenty-one times by test supervisors from agricultural colleges of four states. The representatives of these institutions spoke highly of the cow and her owner, and expressed satisfaction as to the methods employed in handling her.

(Continued on page ten)

COUNTY WIDE LIVE STOCK IMPROVEMENT PLAN FOR CHESTER COUNTY

Several meetings have been held recently at West Chester, Pa., planning for the coming combined picnic of the Chester County Live Stock Breeders Association, Ponoma Grange, No. 3, and Farm Bureau members, to be held in Lenape Park, West Chester, Pa., August 23rd.

The following committee has charge of the general arrangements:

Publicity and Music

Dale Andrews
E. L. McKinstry

Park Arrangements and Property

Harry H. Pratt William Goodwin
Albert Hoopes Albert Huey

Finances

L. K. Stubbs

Reception and Entertainment

C. M. Burdette M. Farquhar
Francis Williamson M. T. Phillips

The committee has full assurance that Hon. E. T. Meredith, National Secretary of Agriculture, will be present and deliver an address, as will also Hon. Fred Rasmussen, Secretary of Agriculture for Pennsylvania. Other important leaders in the dairy world, including M. D. Munn, president National Dairy Council; Robert Scoville, president American Guernsey Breeders Association; D. D. Aitken, president Holstein Friesian Association of America; Milo Campbell, president National Milk Producers Association; James Watson, president National Ayrshire Breeders Association; John McSparran, Master Pennsylvania State Grange; James Dodge, president National Berkshire Breeders Association; Dean C. F. Curtis, president Iowa State College; Hon. Wm. C. Sprout, Governor of the state of Pennsylvania; R. W. Balderston, secretary Inter-State Milk Producers Association, and other prominent men in the dairy and agricultural world have been invited to attend.

The principal purpose of the gathering will be that of introducing a county wide live stock improvement association, which will include the making of an intensive county survey of all classes and breeds of live stock, working co-operatively with the State Department of Agriculture and the Pennsylvania State College. This survey it is believed, will form a working basis for all future efforts along breeding lines.

Farmers of Chester and Delaware counties as well as those from other territories are being invited to attend this gathering which the promoters believe will be one of the most important live stock improvement gatherings ever held in the east.

The Blair County, (Pa.) local of the Inter-State Milk Producers Association, will hold a picnic at Lake Mont Park, between Holidaysburg and Altoona on the Logan Valley Transit Line, in connection with the Blair County Grange on Thursday, August 26th. There will be prominent speakers, all kinds of amusements, music, dancing and a base ball game. A general good time is promised all who attend.

NEWS OF THE LOCALS

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BALTIMORE MILK MARKET

By D. G. Harry, President Maryland State Dairymen's Association

At a price conference held in Baltimore, July 27th, between the Maryland State Dairymen's Association and members of the Milk Bottlers Exchange, with representatives of the Women's Civic League and Dr. Clyde L. King, of Philadelphia present, it was agreed to increase the price of milk to the producer one cent per gallon and to discontinue the surplus price which has prevailed since April.

The price to the consumer remains the same, viz: 16 cents per quart. The price agreed upon for August, 38 cents per gallon for 4% milk, is 4 cents higher than that of a year ago, and while we believe the price to the producer should be higher, due to the higher price of labor and dairy feed, it was thought best not to increase the price to the consumer at this time. Dr. King stated that the increased cost of distributing milk prohibited the dealer further advancing the price to the producer without raise in street price.

The dry weather has greatly affected the pasture in the territory which supplies Baltimore City with milk, requiring the feeding of some kind of green food. This will doubtless materially decrease the supply, which in this market now about equals the demand.

Unless the production costs are reduced, it will be necessary for the producer to receive an increase September 1st.

Tuberculin Testing Cattle and Pasteurizing Milk in Delaware

The State Board of health of Delaware adopted resolutions at a meeting held on July 1st, which became effective August first, 1920.

These resolutions make it imperative that all milk and cream offered for sale in the State of Delaware (1) must be pasteurized according to the regulations of this board or (2) unless it is obtained from cows that have successfully passed the tuberculin test within one year, such test being made according to the rules and regulations of the State Live Stock Sanitary Board, or of the U. S. Bureau of Animal Industry, the cows being properly numbered with non-removable ear tags and the records being filed with the State Live Stock Sanitary Board; provided, that no penalty for violation of this regulation shall be incurred in any case in which the owner of the herd has filed with the State Live Stock Sanitary Board a written application for such a test before the date when such a test was due, and be it further

RESOLVED, that any person who violates any of the regulations above set forth shall upon conviction thereof be fined not less than five nor more than twenty-five dollars with costs, and each day during which a violation of these regulations shall be allowed to continue shall be deemed to be a separate and distinct offense.

Clean milk, properly cared for, is one of the best foods obtainable. It is nourishing, digestible and economical.

CAN YOU CALCULATE THE SURPLUS MILK PRICE?

Explanation and Easy Method Shown Herewith

In that quite a few producers do not fully understand the present method of selling milk, generally known as the Philadelphia surplus plan, we aim to explain and illustrate in detail the method and the object expected to be attained by the use of this plan.

For years there has been a marked irregularity in the supply of milk coming into the Philadelphia market. At times there was a marked shortage, again there was a pronounced surplus. Some dairymen produced a fairly average amount of milk the year round. Others produced milk only in certain seasons, some months not shipping at all. It was hoped that some plan would be evolved whereby the irregular producers might become more regular in their supply and thus bring about a more normal condition throughout the year.

There is no idea that production should be curtailed but that the more even output would obviate the large surplus, and, at times—shortage, at various seasons of the year and thus overcome the sudden and sharp price reactions at these times, which have long tended to upset stable conditions in the market.

In arriving at a basis on which might be computed an average approximate consumption of milk in this territory, statistics showing the average monthly receipts of milk coming into the city of Philadelphia and statistics showing the average receipts of milk at some 20 receiving stations in the territory were taken.

From experience and from these statistics, the months of October, November and December, 1919, were taken on which to base an average for the year 1920. It is true that these months represented, in some sections, practically the lowest amount shipped during the year, but the association had to deal, not with conditions in individual districts, but with a broad question of the amount of milk coming into the city for consumption, from all sections of the territory, and experience has proven that the selection was not altogether unwise.

The average production, therefore, of the three months named was taken as representing the average amount of milk normally consumed, or representing 100 per cent. of the requirements. That there was some variation in normal consumption was unquestioned and a percentage spread above the actual average amount shipped, as shown by October, November and December, was allowed according to the following table

January	.....100%
February	.....100%
March	.....100%
April	.....100%
May	.....110%
June	.....110%
July	.....110%
August	.....105%
September	.....100%

In other words in the 100 per cent. months the basic quantity established would be the amount of milk on which the basic price should be paid. In May, June and July an addition of 10 per

cent. of the basic quantity of milk shipped was to be paid for at the basic price while in August a 5 per cent. increase in the basic quantity was to be allowed.

All the milk delivered above the basic quantity in any month except October, November and December, with the exception of the allowances before noted in the summer months, is considered surplus milk, in that under the older selling plans it represented the surplus which was customarily manufactured into butter and other milk products or sold at a loss by dealers.

Easy Method of Figuring Surplus Price

Farmer A	Shipped	Farmer B
2100 lbs.	October	954 quarts
2000 lbs.	November	909 quarts
1900 lbs.	December	864 quarts

2000 lbs.	average	909 quarts
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Therefore farmer A has a basic average quantity of 2000 pounds and farmer B one of 909 quarts.

Farmer A would be paid on a basic quantity of 2000 pounds each month except May, June and July, when his basic quantity would be 2200 pounds

The surplus price varying in accordance with the monthly butter market. Farmer B selling on a delivered Philadelphia or direct shipped basis, by the quart, shipping 1212 quarts in February would have 909 quarts at the basic and 293 quarts at the surplus or manufacturing price, this based on 4 per cent. butterfat content, would be figured as follows:

909 quarts @ 9c delivered Phila...\$81.81
Average butter price...\$.663
20% bonus132

Per cent. fat......04

Price per cwt.....\$3.180

Basic receiving station

price per cwt.....\$3.61

Surplus price per cwt. 3.18

Difference in cents... 43 per cwt.

46 qts)43(.0096

Basic price per quart... .09

Less differential0096

Surplus price per qt...\$.0804

303 quarts @ 8 cents per qt..... 24.24

Total...\$106.05

In the removal of tenants on farms the basis given the incoming tenant shall take the average production of the farm for previous tenure as a basis for computation. New shippers in business are to be paid on a basis of 50 per cent. of the milk shipped at the basic and 50 per cent. at the surplus or manufacturing price.

Under this arrangement every dealer agrees to accept all the milk offered by producers, provided same is clean and in a marketable condition.

Changes in basic prices are to be arrived at as heretofore when conditions of the market warrant such action.

We believe in placing this information and the various calculations before our readers, so they will be fully able to understand the Philadelphia selling plan in its entirety, which plan, subject to minor changes, will remain in force during 1921. The October, November and December, 1920, shipments being considered as all basic quantities and establishing the average basic quantity of each shipper to apply on 1921 shipments.

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NEW YORK MARKET FOR MONTH OF AUGUST

At the May meeting of the Dairy-men's League and the Conference Board, the price of grade B milk in New York for August in the 200 mile zone, was agreed upon at \$3.35 per hundred for 3 per cent. milk. This is equivalent to \$3.75 for four per cent. milk. This represents an advance of 40 cents per hundred over the price paid for July.

There's a "kick" in every glass of milk.

Spring fever cured by milk.

Brain fog cured by milk.

This surplus or milk in excess of normal consumption was to be paid for on a manufacturing price basis and the plan adopted was to take the average monthly price of 92 score solid packed creamery butter, at New York City, as a basis of calculation. To allow for over run in butter manufacture and to compensate for the skimmed milk remaining from such manufacture a premium of twenty per cent. of this average price was taken as the flat basis calculation. Four per cent. butterfat content was taken as the established standard and the usual 4 cents for each one-tenth per cent. of butterfat in the milk shipped, up or down, was applied.

The 50-60 mile zone was established as a standard and the surplus price figured at that point was affective at all receiving stations, wherever located.

Direct shipped milk is calculated by paying for the surplus at a price proportionately lower than the maximum price as is the difference in the basic and surplus prices at receiving stations in the 50-60 mile zone.

and in August when the basic quantity would be 2100 lbs., while farmer B would be paid for 909 quarts as his basic quantity, each month, except in May and June and July when the basic quantity would be 999 quarts and in August 954 quarts.

We will assume that in February Farmer A shipped a total of 3000 pounds or 2000 pounds at the basic and 1000 pounds at the surplus or manufactured price basis. The following calculation, using 4 per cent. butterfat milk as a basis, shows his price at the 50-60 mile zone.

2000 lbs. basic @ \$3.61 per cwt...\$72.20
Average butter price...\$.669
20% bonus132

Butterfat %04

Price per cwt.....\$3.180

1000 lbs. surplus..... 31.80

Total amount.....\$104.00

INTER STATE MILK PRODUCERS REVIEW

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Application for entry as second class
matter is pending.

Editorial

County gatherings of dairymen, stock breeders and agriculturalists generally are being planned with a view of co-operation and betterments in these various lines.

These efforts should command the attention and have the hearty support and co-operation of every one interested. We believe that material betterments can result from these gatherings. Plans for greater co-operation and improvements usually grow out of these meetings.

Every one of our readers should endeavor to learn when and where such meetings are to be held. If there is nothing planned for your own county attend the meetings in the neighboring county. With the harvest season over farmers should begin to give some consideration to plans for the general betterment of dairy conditions.

Organization is the principal factor in the successful operation of all farm work or betterments. Individual effort is good and goes a long way toward the end but real improvements in general conditions can only be brought about by team work—in other words organization and co-operation.

The Inter State Milk Producers Association through its directors, executive committee and officers is doing a wonderful amount of work toward betterments in the dairy industry. The Milk Producers Review, the official organ of the association, going to all its members, carries the word each month, of what is going on in the dairy world, price quotations, both in your own and neighboring markets. Never before have the farmers in the Philadelphia milk shed had these features presented to them in their present form. The news matter printed is timely and instructive and the time taken to read the "Review" is time well spent.

Work along co-operative lines, however, should not slacken because your Inter-State Association has accomplished any one betterment or improvement in conditions.

Your local organization has a duty to perform as well as you individually.

Do you keep your local active? Have regular or frequent meetings and keep things up to correct pitch? If you do not you are missing a great opportunity to do good work. A local can only be as strong and valuable to the dairyman as he individually makes it. A strong local, that is, one in which a large majority of the dairy farmers in any community are members, goes a long way toward improving conditions generally. Every local should aim for 100 per cent. membership in its community. If you have not reached that record, you had better get busy. The stronger you are the better off you are. This has been conclusively proven in many cases.

The officers of the locals should be the leaders in the local organizations. If your officers are not active, get busy. We cannot stand still, we must forge ahead. Standing still is equivalent to going behind. It will interest you to know that by co-operative work membership in one county increased from 523 to 882 in a few months work.

Not alone do benefits in the milk industry come from strong locals. There are gains that can be made in other directions. Out of many of our locals with the aid of the County Farm Bureau Agents, have grown other very beneficial organizations.

Go to it—get your local working actively and the rest will be easy.

Boost—boost for the Inter-State Milk Producers Association, but don't knock. If you think you have a kick coming, don't nurse it—don't complain about it at the country store—get in touch with the officers of your local. If they can't straighten you out write or come to headquarters, 720 Heed Bldg., Philadelphia, and our officers will do all they can to help you. They have untangled many a knotty proposition, why not yours? But for goodness sake don't sit still and knock. You will feel better if you get it out of your system.

AUGUST MILK PRICES

The price of market milk for August and September has been advanced one cent a quart or 46 cents per hundred pounds. Conditions governing productions warrant this even in the face of the present supply.

With this advance, which we consider a fair price, dairymen should make every effort to produce milk, not only in sufficient quantity to meet the demand but also of the quality demanded by consumers. Milk buyers are becoming more and more critical in the grade of milk they are receiving. Competition for business makes this necessary. Consumers paying present retail prices demand and are entitled to receive milk of good quality.

Dairymen, therefore, should do everything possible to produce a grade and quality of milk, necessary to meet the demands of consumers.

Constant effort should be made to produce milk on a more even basis, so that the supply more fully approximates the demand in the various seasons. We know that this cannot be done without the elapse of considerable time; but the effort should be in that direction.

Your organization is making every effort to better the condition of the dairy farmer, but it must be remembered that it cannot accomplish great

things without the support and co-operation of the individual members. Every dairy farmer should be associated with the organization. It's up to our present members to assist in bringing those who are riding on your wagon and at your expense, into the association.

One of the recent success of the Inter-State Milk Producers Association in obtaining a fair price for milk for its producers, involved the change of ownership of a South Jersey manufacturing plant where for a long time the price paid was at least a cent a quart below the established price agreed upon by the milk producers and representatives of the public, dealers and manufacturers.

Beginning with July milk at this station was paid for on what is termed the association price. This established without a question the value of organized effort on the part of the association.

Have you read the advertisements in the Review? You should give them the same consideration as you do the reading columns. New machinery, equipment, feeds, labor saving appliances, etc., are frequently first brought to your attention through the advertising columns. You may make many a dollar in time or labor saved by reading the advertisements and writing to such as appeal to you. Always mention the Milk Producers Review when writing to advertisers. They like to know where you saw their ad and we like the Review to have credit for same.

Secretary Balderston Returns

Robert W. Balderston, secretary of the Inter-State Milk Producers Association, who since last December has been on leave of absence for service with the American Friends Service Commission, in connection with the feeding of children in Germany, arrived in New York on Wednesday, July 28th, on the steamer Stavangerfjord, from Christiania, Norway, sailing July 17th.

The vessel on this trip made the first passage between the Orkney Islands and Scotland, which has been avoided since the war owing to mines. Twelve hours hours in the time of the passage was saved by this route.

Mr. Balderston made his appearance at the office of the Inter-State Milk Producers Association on July 29th and by the time this issue is in your hands will have resumed his regular duties as secretary of the association. He will no doubt see many of the members personally in the near future as he has now many engagements to speak at meetings of our locals.

VALUE IN OLD BAGS

Do farmers generally realize the value of old bags? Very frequently shipping bags of various kinds are considered as having served their purpose after having been emptied of their contents on the farm.

If a little care is exercised in looking after empty bags. If they are well shaken out and placed where they will not get wet, mildew and rot, they can be turned into real money.

Of course there is a market—for a kind—for old bags, as loose burlap, but this does not represent their value as bags, and there is usually a ready market for such as have been well cared for.

ONE DAY SESSIONS TO RULE PENNSYLVANIA FARMERS INSTITUTE

Farmers' Institutes during the 1920-21 season will be limited to one-day sessions in each community, except in rare cases where conditions make it advisable to hold two-day sessions. Morning institute sessions will also be eliminated during the coming season.

These changes were decided upon at a conference which Secretary Frederik Rasmussen, of the Pennsylvania Department of Agriculture, held with the county institute chairmen at Pennsylvania State College in connection with Farmers' Week.

It developed at the conference that where the practice has been to hold two-day sessions, the attendance at the first day's meeting was always extremely small and that there was little interest in the first day's program. It was also the consensus of opinion that morning sessions were of little value on account of the small attendance, except in such cases where communities have featured a dinner or similar attraction, each year that brought out the crowds in the mornings. In scores of cases during the past winter, speakers were forced to drive eight or ten miles, late at night through zero weather, arriving at their destination long after midnight in order to be on hand for the opening session of institute the following morning, only to be greeted by an audience of a dozen or less.

Secretary Rasmussen also announced that the Department of Agriculture would follow the same course as in previous years in regard to securing meeting places, the department always having insisted that the community furnish a meeting place for the institute sessions as an evidence of the community's interest.

The plan of sending to each community, speakers who have specialized in subjects of particular interest to that community will also be adhered to, while arrangements have been made for the co-operation of the State College Extension Department in furnishing home economic and similar specialists where their services are wanted.

NATIONAL DAIRY ASSOCIATION 1920 SHOW

We again wish to call your attention to the 1920 show of the National Dairy Association, which will be held in Chicago, Ill., October 7 to 16 inclusive.

Plans are developing rapidly for the biggest and best ever. This show belongs to the people of the dairy industry.

The National Dairy Association is one of the many business organizations that have been formed in the past decade by all big business interests, which are all the results of the highly developed condition of the country, so that the man who does not meet with others in his line of business and help to further business enlightenment, recedes in his duty.

Every dairyman should strive to be counted among those present at the coming show, where there will be a wonderful exhibit of the whole industry so arranged by the government as to be of utmost value to seekers of information on all dairy topics.

Don't forget the date—plan now to attend—Chicago, October 7th to 16th inclusive.

LATEST MARKET PRICES

Philadelphia Milk Prices

Test per cent.	Price per 100 lbs.	Basic Quantity Price per quart	Price for all milk above the Basic Quantity
3.1	\$3.74	8.1	6.2
3.2	3.75	8.2	6.3
3.3	3.80	8.3	6.4
3.4	3.90	8.5	6.6
3.5	3.94	8.6	6.7
3.6	3.98	8.65	6.75
3.7	4.02	8.7	6.8
3.8	4.06	8.8	6.9
3.9	4.10	8.9	7.0
4.0	4.14	9.0	7.1
4.1	4.18	9.1	7.2
4.2	4.22	9.2	7.3
4.3	4.26	9.3	7.4
4.4	4.30	9.35	7.45
4.5	4.34	9.4	7.5
4.6	4.38	9.5	7.6
4.7	4.42	9.6	7.7
4.8	4.46	9.7	7.8
4.9	4.50	9.8	7.9
5.0	4.54	9.9	8.0

When milk is not tested the price f. o. b. Philadelphia is 9 cents per quart.

RECEIVING STATION PRICES

Miles	3% Test	Test %	Price per 100 lbs. surplus milk at all receiving stations
1	3.23	3.1	2.36
11	3.27	3.1	2.40
21	3.26	3.2	2.44
31	3.24	3.3	2.48
41	3.23	3.4	2.52
51	3.21	3.5	2.56
61	3.20	3.6	2.60
71	3.19	3.7	2.64
81	3.18	3.8	2.68
91	3.17	3.9	2.72
101	3.16	4.0	2.76
111	3.15	4.1	2.80
121	3.14	4.2	2.84
131	3.13	4.3	2.88
141	3.12	4.4	2.92
151	3.11	4.5	2.96
161	3.10	4.6	3.00
171	3.09	4.7	3.04
181	3.09	4.8	3.08
191	3.08	4.9	3.12
201	3.07	5.0	3.16

Freight rates on basic milk deducted on a basis of 46 cents—113 per cent. of 40 quarts, plus 3 per cent. war tax. Four-tenths of a cent added or deducted for each tenth of one per cent. butter fat above or below 3 per cent.

Prices for milk above basic quantity based on 120 per cent. of the average monthly or semi-monthly price of solid packed 92 score

August Milk Prices

Subject to change whenever warranted by market conditions.

Test per cent.	Price per 100 lbs.	Basic Quantity Price per quart	Price for all milk above the Basic Quantity
3.1	\$4.20	9.1	7.1
3.2	4.24	9.2	7.2
3.3	4.28	9.3	7.3
3.4	4.32	9.4	7.4
3.5	4.36	9.5	7.5
3.6	4.40	9.6	7.6
3.7	4.44	9.7	7.7
3.8	4.48	9.8	7.8
3.9	4.52	9.9	7.9
4.0	4.56	10.0	8.0
4.1	4.60	10.1	8.1
4.2	4.64	10.2	8.2
4.3	4.68	10.3	8.3
4.4	4.72	10.4	8.4
4.5	4.76	10.5	8.5
4.6	4.80	10.6	8.6
4.7	4.84	10.7	8.7
4.8	4.88	10.8	8.8
4.9	4.92	10.9	8.9
5.0	4.96	11.0	9.0

When milk is not tested the price f. o. b. Philadelphia is 10 cents per quart.

RECEIVING STATION PRICES

Miles	3% Test	Test %	Price per 100 lbs. surplus milk at all receiving stations
1 to 10 incl.	4.26	3.1	3.74
11 to 20 "	4.28	3.2	3.78
21 to 30 "	4.30	3.3	3.82
31 to 40 "	4.32	3.4	3.86
41 to 50 "	4.34	3.5	3.90
51 to 60 "	4.36	3.6	3.94
61 to 70 "	4.38	3.7	3.98
71 to 80 "	4.40	3.8	4.02
81 to 90 "	4.42	3.9	4.06
91 to 100 "	4.44	4.0	4.10
101 to 110 "	4.46	4.1	4.14
111 to 120 "	4.48	4.2	4.18
121 to 130 "	4.50	4.3	4.22
131 to 140 "	4.52	4.4	4.26
141 to 150 "	4.54	4.5	4.30
151 to 160 "	4.56	4.6	4.34
161 to 170 "	4.58	4.7	4.38
171 to 180 "	4.60	4.8	4.42
181 to 190 "	4.62	4.9	4.46
191 to 200 "	4.64	5.0	4.50
201 to 210 "	4.66	5.1	4.54

creamery butter, New York City, in May, June and July an increase of 10 per cent. and in August an increase of 5 per cent. in the basic quantity of milk shipped is allowed.

Month	First half	Average per month
January	\$3.16	\$3.12
February	3.20	3.18
March	3.14	3.19
April	3.38	3.43
May	2.96	3.00
June	2.71	2.76
July	2.72	2.73

AUGUST COMPARATIVE PRICES PAID PRODUCERS
Eastern Territory
4 per cent. butter fat, per 100 pounds
Basic Surplus Pounds

Philadelphia, 50 mile zone \$4.07
New York, 200 mile zone 3.75
Pittsburgh, outlying points 3.65
Baltimore, per gallon f. o. b. .38

RETAIL MILK PRICES
Pasteurized and bottled
Subject to Board of Health Regulations
Grade B or Market Milk

Philadelphia	Quarts	Pints
New York	15	9
Pittsburgh	16	9 1/2
Baltimore	16	9

JULY BUTTER PRICES
92 score solid packed creamery butter, cents per pound

City	Price	City	Price
1 New York	59	Chicago	56 1/2
2 Philadelphia	58 1/2	58	56 1/2
3 New York	58 1/2	58 1/2	56 1/4
4 Philadelphia	58	58 1/2	56 1/4
5 New York	57 1/2	58	56
6 Philadelphia	57 1/2	58	55 3/4
7 New York	58	58 1/2	55 3/4
8 Philadelphia	58 1/2	58 1/2	55 3/4
9 New York	57 3/4	58 1/2	55 3/4
10 Philadelphia	57 1/2	58	55 3/4
11 New York	56 1/2	57 3/4	55
12 Philadelphia	56 1/2	57 1/2	55
13 New York	56 1/2	57 1/2	55
14 Philadelphia	56 1/2	57 1/2	55
15 New York	56	57	54 1/2
16 Philadelphia	55 1/2	56 1/2	55
17 New York	55	56	55
18 Philadelphia	55 1/2	56 1/2	55 1/4
19 New York	55 1/2	55 1/2	55 3/4
20 Philadelphia	54 1/2	54 1/2	52

PRICES PAID PRODUCERS
f. o. b. dealers station
And retail selling prices, Market Milk, nearby cities and towns

City	Price	City	Price
Philadelphia	10	15	9
Allentown, Pa.	9 1/2	10	9
Cumand, N. J.	10	15	9
Harrisburg, Pa.	9	14	8
Norristown, Pa.	9 1/2	14	8
Pottsville	9 1/3	14	8

August Milk Prices

(Continued from page one)

Producers under present conditions should continue their production, so that they may be able to meet requirements during the short months.

MARYLAND MILK TESTERS

Examinations have recently been held in various districts in the state of Maryland, under the new regulations of the State Board of Agriculture, which effects testing of milk at receiving stations, milk depots, creameries and cheese and condensing plants.

All classes of persons engaged in testing milk for inspection or as a basis of payment, except farmers and dairymen who test their milk for their own information come under the provision of the regulations.

All operators who were not examined at the district examination will be examined upon application at the Maryland State College of Agriculture, College Park, Md.

Applications for examinations may be obtained from county agents or will be forwarded upon request by the State Board of Agriculture, Room 816 Fidelity Building, Baltimore, Md.

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS

When The Days Are Hot

protect your cows against the usual run down physical condition due to the excessive heat and short pasturage—a condition that always results in a marked falling off in milk production. You can't afford to let your cows run down now. If you do, your Fall and Winter milk production will be curtailed.

The Missouri Agricultural Experiment Station in circular No. 44 says: "When hot weather and short pastures come the milk flow drops one-half to two-thirds, and the cows are almost dry at the beginning of winter. It is almost impossible to restore the flow of milk to the original amount after it is once allowed to run down from lack of feed. To make large returns from the cow a large yearly production must be had, and to do this the flow of milk must be kept up ten or eleven months in the year."

SCHUMACHER FEED AND BIG "O" DAIRY RATION
fed regularly when cows are on pasture, increasing the amount as the pasture gets shorter, will keep your cows up to normal production right through the hot Summer months. These ideal feeds will also supply your cows with added vitality to withstand the withering heat of Summer and bring them up to the Fall and Winter season physically fit to give you maximum production. Write for our interesting dairy folder, "LONG TIME MILK PRODUCTION AND HOW TO GET IT." It's FREE.

The Quaker Oats Company
Address, Chicago, U. S. A.

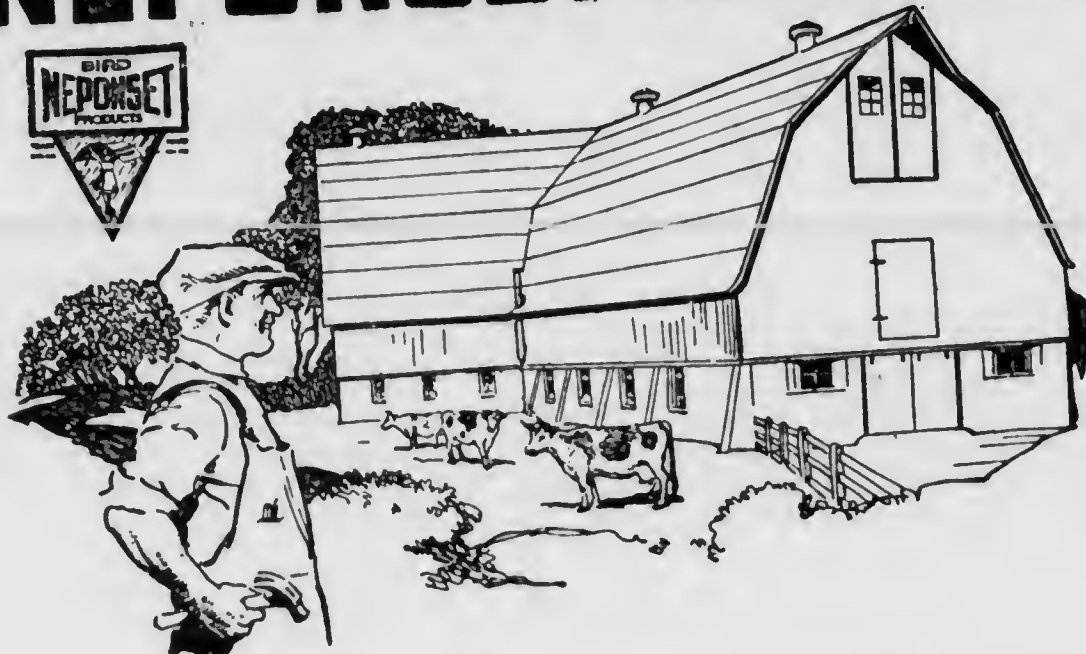


Happy Days for the dairyman when bossy gets her nose into a bag of Union Grains and starts running over! Happy Days, too, for the creamery that wants more butter fat from the farmers whose product it buys.

Expert feed mixers use Union Grains in preference to their own mixtures, lots less trouble and brings better results. Write for cost sheet.

THE UBIKO MILLING COMPANY Dept. J Cincinnati, Ohio
UBIKO
BALANCED RATIONS
For All Farm Stock

NEPONSET ROOFS



In the long run Bird's Neponset Paroid is the cheapest roofing to use

Twenty years without a single repair is not an unusual record for a Paroid Roof.

That's why we say that Paroid is the cheapest roofing to use.

Paroid comes in natural gray. Every roll complete, with nails and cement. If your dealer does not carry Paroid we will ship direct to you.

Bird & Son, inc. (Established 1795) East Walpole, Mass.



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When You Go to Buy

Paints and Varnishes

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EUGENE E. NICE

Philadelphia

HINTS TO DAIRYMEN

Did you ever stop to think:
That the best way to cut down the cost of milk production is to increase producers by having better cows?

That ten cows producing 10,000 pounds of milk are equal to twenty cows producing 5,000 pounds of milk?

Nations that drink milk rule the world.

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS



BENGAL FURNACE

America's Best
ONE PIPE
FURNACE
No Wall Cutting
No Piping
SAVES MONEY
More Heat Less Fuel

Investigate this proposition
Write for information

Floyd, Wells Co.
ROYERSFORD, PA.

Manufacturers
Heaters, Ranges, Stoves, Etc.

COW TESTING ASSOCIATIONS A Year's Record

The Cumberland County, (Pa.) Cow-Testing Association, organized June 15, 1919, completed its first year's work on June 22, 1920. Twenty-five herds, comprising 340 cows, constituted the initial membership and 21 herds completed the testing year. These 21 herds represented 300 cows. Out of this number the one striking feature of the report is that 56 animals were sold as being unprofitable. The average production per cow was 7,350 pounds of milk with 264.1 pounds butterfat. The six herds running highest in milk production follow:

	No.	Lbs.	Lbs.
	Breed	Cows	Milk
I. V. Otto.....H.	18	12263	392.3
J. H. Lear.....H.	12	10098	336.8
J. W. Miller, R.&G.H.	12	9905	344.4
H. A. Schultz, R.&G.H.	13	9900	326.1
E. C. Luddt...R.&G.H.	10	9000	311.7
G. L. Strock, R.&G.H.	52	9381	296.9

The highest record was 18,256 pounds of milk and 564.2 pounds butterfat made by a pure-bred Holstein cow owned by I. V. Otto. J. W. Miller runs third in milk production, yet he holds first place in the association for economical milk production.

Mr. Schultz had ten cows out of thirteen that averaged 10,122 pounds of milk. Mr. Strock's herd of 52 cows averaged over 9,000 pounds, a rather remarkable herd average for this number of cows.

Eighteen herds at the close of the year were being fed home-mixed rations as compared to nine being thus fed at the beginning of the year.

A. A. RAUDABAUGH, Tester.

Why Danish Butter Sells

No better illustration can be cited of the value of a system of grading backed by the Government than that of Denmark. This nation boasts of an extensive export trade in butter and has developed a system of inspection and branding of all butter destined for exportation whereby the Government supervises the grading system and allows only those creameries to use the national trade-mark whose products are proved to be of satisfactory quality. The Danish system recognizes only one grade of butter—the best. As a result the producers and sellers of Denmark butter always find a ready market in every country.

Holland, New Zealand and Ireland likewise maintain Government, inspection and branding systems which have gained for these countries a ready market for all the butter they export.

Therefore the Bureau of Markets, United States Department of Agriculture, contends that a national system for grading dairy products produced in the United States would be advantages to all who are engaged in this important branch of agriculture. If the dairy products of this nation are to be received with favor and the demand for them increased in foreign lands, a national grading system must be adopted.

It has been demonstrated many times that in the markets of the world the seller with the best-graded products is the favorite, because graded goods are standard and the buyer knows what he will get when he buys. Standardization establishes a common language between the buyer in one country and the seller in another, which creates understanding and confidence and prevents disputes.

A national grading system usually provides for authorized national inspectors to pass upon the goods and thus puts into effect a uniform standard application of the grades established, whatever they may be, that cannot be maintained unless the system is nation wide in its scope. In fact, experience has shown that the decisive factor in the development of foreign business often hinges on the proper standardization and grading of the products to be sold.

Philosophy

"Girard" in the Philadelphia Press said recently: An Ohio bank president says men should not leave the farms to work for bigger wages in the city.

But if another bank offered that bank president twice his present salary would he not quit his present job?

It is easy to say to the other fellow: "You stay on the farm and produce big crops while I go to the city, earn double your wages and enjoy the cheap food you raise."

But, will George do it, after you tell him? He reads his paper every day and learns about the big wages in cities where work-days are short and labor light compared to his in the harvest field or behind the plow. So off he comes to the city to get a slice of easy money. The Ohio bank president has a chance to go back on the farm. Why does he stay where he is?

Better prospects and more pay! Very likely he once lived on a farm and left it for the same reason that impelled thousands of others seek the city.

The Summer Silo

By A. L. Haecker

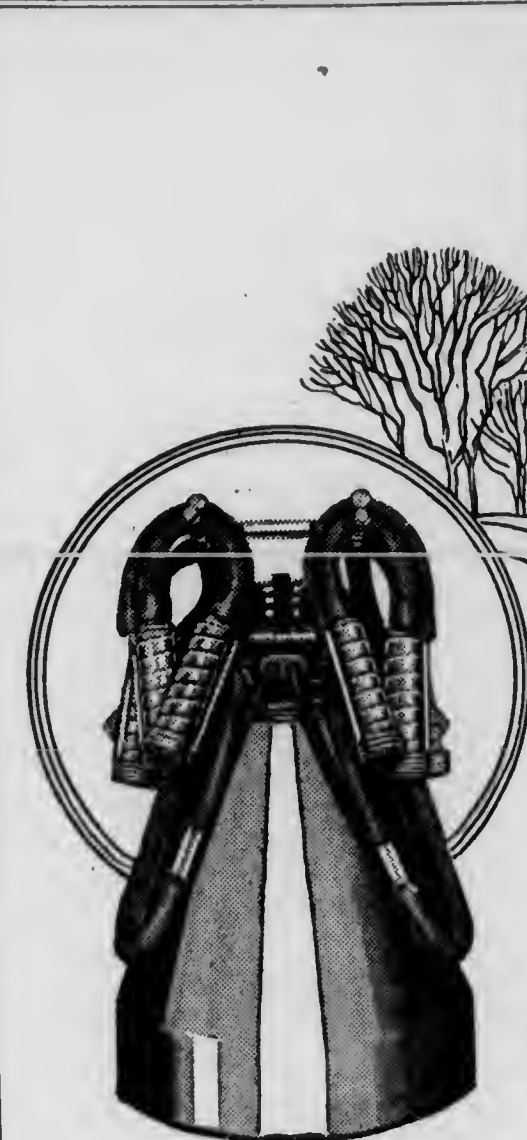
The silo can be used for both winter and summer, or silage can be fed the year round in all seasons. By the summer silo we refer particularly to the supply of silage during the summer months. Silos, as a rule, are bought with the idea of supplying winter feed. Silos are put up in the summer, filled in the fall, and generally before new grass comes every bit of silage is gone, and the dairymen especially notes at this time a severe shrinkage in milk flow. Profit in the dairy means supplying the animal with its requirement at all times, never allowing it to shrink through want of food. A shrink is unprofitable. It cannot be made up, and it is bad business. For this reason and many others the summer silo is rapidly gaining favor.

I recently heard a very well posted dairyman remark that if he had to choose between winter or summer silage feeding, he would prefer to go without the winter supply. This man had much experience in the business; he knew that the biggest damage to a dairy herd is generally produced during July and August when pastures become dry and short; flies are bad and conditions most unfavorable.

The lure of the pasture is too great for the average cow-keeper. It is so easy to simply turn the cows on the pasture and forget them, except, perhaps, on a Sunday once in a while when they are salted, or if they be milk cows when rounded up morning and night for milking. True there is a short season, especially in the corn belt, when pastures are exceptionally good. In May and June we generally find the grass tender and green and plentiful in quantity, but even during these months silage can be fed with profit to any class of cattle. During the early part of May the grass is more or less watery and lacks body and nutriment. Animals are often injured by the assumption that they are receiving all the green feed that they need. In June, as a rule, the grass is at its perfection, but July comes with a drought, flies become very numerous, weeds spring up in the grass and pasturage conditions, especially in the middle states, become poor. This is the time for summer silo. With cows in a darkened barn and plenty of succulent silage, good records can be produced and that at little cost.

Land worth two hundred dollars or more an acre can hardly be made to pay dividends when put in pasture. If this be good tillable land it can be made to produce from six to eight times more feed by planting to corn and putting the corn in the silo. If we wish to make our acres earn, and that I believe is the desire of the best farmers, we must consider carefully this pasture subject.

As time goes on silage will be used more and more for summer feeding. Experience has taught that it is economical and makes for large and economical production. It is the cheapest source of summer feeding, and it prevents the dairy herd from experiencing that fearful shrink which we note each year during the months of July and August. The feeder will learn that he can keep animals in full flush and vigorous condition during a period when they are, as a rule, set back and made



This Seventeen Year Old Girl Milks Twenty-seven Holsteins with the Perfection

TWENTY-SEVEN cows, especially when some of them give as much as 100 pounds in a day, is quite a bunch for a girl to milk. When Theodore Gillis' 17 year old daughter can handle them all alone with the Perfection, it's not hard to understand why Mr. Gillis thinks his milker is a wonderful machine.

Mr. Gillis has labor problems just like everybody else. And sometimes he's right up against the wall for hired help. But since he has a Perfection, his daughter can always help him out. "The Perfection Milker was rightly named," he says, "for it is a perfect milker and so easy to operate that my daughter, 17 years old, has milked my whole herd of 27 Holstein cows every night during the summer when we were short of help."

The Perfection Gets More Milk

"The Perfection gets more milk than any hand milker can get from my cows. One of my cows, 5 years old, gave as high as 102 pounds of milk in a day. A heifer gave 64 pounds in a day. One of my cows, which had been milked nearly two years without freshening we could not dry up without taking the machine off her."

Just Ask Your Neighbors

"We have several other kinds of milking machines in this neighborhood but everyone seems to think the Perfection gives the best results and is the most reliable machine."

Names, Addresses and Catalog Waiting For You

How much would it be worth to you to have your milking problem solved? Find out about the Perfection Milker. We'll gladly send you names and addresses of owners so you can investigate for yourself. Just ask the men who own Perfections what they think of them. We will also send without charge a copy of "What the Dairyman Wants to Know", the book that answers every question about milking machines. Write.

Perfection Manufacturing Company

2168 E. Hennepin Avenue

Minneapolis, Minn.

The Perfection is the Milker with the Downward Squeeze Like the Calf

PERFECTION MILKER

strippers and unprofitable winter producers. With the summer silo the small farmer living on forty or eighty acres can keep a good herd of cattle and do it with profit. The man who is attempting to farm too much land can find this method practical and much more profitable; he should sell half his land and farm the other half better. The summer silo is wise and intelligent feeding practice; it tends to build up the land and make acres earn a higher rate. Consider the subject carefully, you men who keep cattle on your farms; consult those who have had experience, and I venture to say you will come to the summer silo as thousands of others have done.

Men have died from many drinks, but ne'er from drinking milk.

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS

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INTER-STATE Milk Producers Review

Inter-State Milk Producers Assn, Inc., Publishers
720-722 Heed Bldg., Philadelphia, Pa.

I hereby subscribe to the Inter-State Milk Producers Review, at the rate of 50 cents per year, in advance.

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 Labor Saving Equipment for the Dairy Barn



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Reading Bone Fertilizer

Quality Service Satisfaction
 Feeding the World: The American farmer's job. To do your utmost the land should be fed too. Stick to the old dependable when it comes to feeding the land—Reading Bone Fertilizer.
 (This trade mark means quality)
 Reading Bone Fertilizer Co., Reading, Pa.
 Ask your dealer for Reading Bone Fertilizer. Write for booklet and further information.

Children must have milk.
 Adults should have milk.
 Young-old men do drink milk.

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS

SECRETARY BALDERSTON WRITES FROM DENMARK

Christiania, Norway
 Just before leaving for home, I am tempted to write a "home-coming" letter to the readers of the "Review."

I have been among the dairy farmers in Denmark, for some time and want to tell you about conditions generally while impressions are still fresh. I have seen the types of dairy cattle, bacon hogs and farm horses at the great Nestved Show. I have watched the making of Danish butter in a co-operative factory. Visited with representative farmers, on their farms, watched their sons at study in the District Agricultural Schools and their National Agricultural College at Copenhagen—and I have talked with the officials of their agricultural organizations in their offices. I came away with a number of fairly distinct ideas that all groups themselves around the central thought—co-operation.

The problems of production and of marketing farm products in Denmark are too important to be hastily discussed here. For the solution of all of them the Dane has formed the proper co-operative. Let me give a list of the names of some of them as translated into English.

complishment to be proud of but then after all it is but a means to an end. The real test is in their results. "By their fruits shall ye know them."

The importance of agriculture as the foundation of Danish prosperity will be told you by everyone you meet in Copenhagen. That city never forgets that it could not exist but for the farmers; for its chief commerce is in exporting the products of the soil and importing those things that come in exchange therefore.

The total business done by Danish co-operatives represented in 1915 a turn over of about \$250,000,000.

Through the dairy control of milk societies, the average production per cow, taken over all Denmark, increased 8 1/2 per cent. in ten years, and there has been an average increase of 2 per cent. in butterfat content.

By enriching the relatively poor soil through the dairy cow, the average production of wheat has been increased in 30 years from 30.9 bushels per acre to 43.1 bushels. This is now the highest for all Europe.

Are you interested in my personal impression of the Danish farmer? Why they



"Lies" Red Danish Milk Breed, weight 1500 lbs. 1st Prize, 1919 Show
 7 Year Record, average 12,100 lbs. Owned by Frederik Damgaard, Fyen, Denmark

- (1) Co-operative distributing societies for dairy feeds, seeds, machinery, etc.
- (2) Co-operative dairy societies (creameries.)
- (3) Co-operative slaughter houses (bacon factories.)
- (4) Co-operative egg export society.
- (5) Co-operative butter society.
- (6) Co-operative breeding societies.
 - (a) cattle breeding
 - (b) horse breeding
 - (c) pig breeding.
- (7) Control societies (contesting associations.)
- (8) Credit associations (Farm Loans.)
- (9) Co-operative banks.
 (Now all joined in one co-operative central organization of co-operative banks.)
- (10) Co-operative insurance societies.
- (11) A great variety of related co-operative undertakings of lesser importance.
- (12) The central committee representing all those above mentioned (Roughly corresponding to our National Board of Farm Organizations.)

Such a list in itself represents an ac-

seem just like our farmers at home in Pennsylvania, New Jersey, Maryland or Delaware. Except for the difference in language, I feel just as much at home among them as I would in a similar group of you. I could understand their problems and fall in with their habits of life. They must work hard, very hard.

In dairying methods they use roots largely in place of our silos. Hay and grain harvest, in the uncertainty of the Danish weather, means much extra work.
 To me the most impressive thought I bring home is that of the high average of accomplishment, good crops, good cows, properly developed markets, and a fair measure of economic and social independence achieved from unpromising beginnings and wrung from an unwilling soil, not through individual effort, for no one man is responsible, except as he took part in the co-operative movement and not through governmental aid and guidance, for the government only recognized and aided the co-operatives after they were an assured success. ROBERT H. BALDERSTON.

CONTROL OF HOG CHOLERA IN STATE OF MARYLAND

Referring to hog cholera work in the state of Maryland and the effort that has been made to control the disease the following information relative to the work done in the first half of 1920 is interesting.

Reports received show that hog cholera has made its appearance on 104 farms against 138 farms for the same period in 1919. The outbreaks by counties have been as follows:

Allegany	6
Anne Arundel	4
Baltimore	1
Calvert	2
Caroline	0
Carroll	3
Cecil	4
Charles	1
Dorchester	8
Frederick	14
Garrett	0
Harford	2
Howard	4
Kent	1
Montgomery	5
Prince George	14
Queen Anne	3
Somerset	7
St. Mary's	4
Talbot	0
Washington	14
Wicomico	2
Worcester	1

Reports indicate that with possibly two exceptions and in these instances we have not been able to obtain data regarding the outbreak on these two farms, the disease has not spread from the farm or farms on which it existed at the time the report was made of the outbreak. This would indicate that the farmers and stock raisers are more promptly reporting illness among swine.

While the use of the anti-hog cholera serum is the only method that will minimize the losses and shorten the duration of the disease in sick and exposed herds, it must be remembered that "publicity" is the best "serum" for preventing the spread of the infection. Information regarding an outbreak of hog cholera on any premises gives those interested an opportunity to take the necessary steps to prevent the spread of the infection.

You are urged that should there be an outbreak of disease among swine in your neighborhood or any indication that those who have lost hogs are not properly disposing of the carcasses, that you report same to your county agent, J. H. Knobe or Dr. C. C. Cole, Elkton, who is the Bureau representative in the Eastern Shore District.

J. K. ATHERTON, Inspector.

A ROUGHAGE RESERVE

The feeding of cottonseed cake does not do away with the necessity for roughage, either in the form of range forage or in some other form. The dry sired forage on the range will usually meet this need, but in case of prolonged drought the supply of range feed may become exhausted. To meet such emergencies, it would be a distinct advantage to accumulate a reserve supply of roughage in the form of hay or ensilage during the more favorable years.

Milk worth a few cents a day may save doctor bills—a hundred times as much.

(This announcement is made with the approval of the Bureau of Animal Industry, United States Department of Agriculture)

Better Sires-Better Stock \$1,000 Money Prize

UNDER rules and conditions provided by the Bureau of Animal Industry, United States Department of Agriculture, a money prize of one thousand dollars will be paid by Chapin & Company, Chicago, to that county in the United States which first becomes free from inferior sires.

By inferior sires are meant low quality purebred sires as well as all crossbred, grade and scrub sires. The word "sires" includes stallions, bulls, jacks, rams, boars and bucks. Poultry is not included.

A county eligible to receive the prize must have a total of 500 or more sires of all classes and 5,000 or more head of female breeding stock.

All owners of males kept for breeding purposes, in the classes mentioned, and a majority of other livestock owners in the county, must have declared their intention of hereafter using nothing but purebred sires by joining the "Better Sires—Better Stock" campaign of the Bureau of Animal Industry.

Upon notification by a County Agent or the officer of a county livestock organization, that the county he represents is free from inferior sires, the Bureau of Animal Industry will investigate the

claim. If the Federal expert finds that the county is, in fact, free from inferior sires, the Chief of the Bureau of Animal Industry will declare that county as winner of the prize.

The prize money will be deposited in a local bank to the credit of the County Agent, official of the county livestock organization or other person or persons considered best qualified to administer the fund. It will be maintained as a revolving fund from which loans may be made to persons desiring to purchase purebred sires in any of the classes mentioned. After three years from date of the award, the fund, with accumulated interest, will be distributed in five equal prizes, in open competition, for the most meritorious young stock resulting from the use of purebred sires. One prize for horses, beef cattle, dairy cattle, sheep and swine.

County agents or officials of county livestock organizations desiring to enter their counties as competitors for this prize, will indicate their intention of so doing by letter to Chapin & Company, sending a duplicate of the letter to the Chief of Bureau of Animal Industry, United States Department of Agriculture, Washington, D. C.

No time limit is placed on the offer of this prize. No other rules govern the competition except those herewith provided by the Bureau of Animal Industry.

In addition to the money prize, the county that is declared winner will be presented with a silk banner and a certificate signed by Secretary of Agriculture E. T. Meredith and Dr. John R. Mohler, Chief of Bureau of Animal Industry.

CHAPIN & COMPANY

327 S. La Salle Street

Chicago, Illinois

Bags Sacks

We pay 14c each for beet pulp bags. Proportionate prices for other sizes.

Better write for price list NOW

Larimer Bag Co.
 WASHINGTON, D. C.



The original ear label, used by many Record Associations and best breeders. Will identify your live stock and aid you in keeping breeding and production records. Samples free.

C. H. DANA CO., 87 Main Street, West Lebanon, N. H.

Prest-O-Lite STORAGE BATTERY SERVICE

Prest-O-Lite Service Prevents Costly Repair Bills
 YOUR storage battery should be tested regularly. Perhaps it needs repairing—who can tell? There's one sure way to find out. Call and let us test your battery today. Should a test indicate the necessity for repairs, we have a service battery for you to use while the work is being done. You have the continuous use of your car. When your battery is ready we will notify you promptly. You will be agreeable surprised at the moderation of our charges in these days of high prices.

Pusey-Young Storage Battery Station

117 W. MARKET ST. COATESVILLE, PA. WEST CHESTER, PA. FELS GARAGE, BERWYN, PA.

Don't neglect reading the Advertisements. They contain a lot of useful information

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Get Bigger Milk Checks

Simply Feed your cows
International Special Dairy Feed—the feed that
lowers your feed bill and increases the milk flow. An army of
farmers in every dairy section of America recommend and use it.

International Special Dairy Feed "Makes More Milk"



There's only one best method to feed your herd. There's only
one best method to get the most milk, and that's the Inter-
national way. This fact has been proved by practical, pho-
non-sense dairymen who have tested International Special
Dairy Feed over long periods. And these tests proved con-
clusively that this unusual feed produced more milk than any
other similar feed on the market.

Order a Trial Ton from Your Dealer Today

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MINNEAPOLIS, MINN.

Mills at Minneapolis and Memphis

Place your order with
your dealer for

LEWIS

LINSEED OIL CAKE—in 300 lb. Bags

or
LINSEED CAKE MEAL—in 100 lb. Bags

These foodstuffs are made right in Phila-
delphia so that your dealer receives his ship-
ments without the transportation delays which occur on
shipments from the Middle West.

Ask the farmer whose
cattle eat Lewis Feed

JOHN T. LEWIS & BRO. COMPANY

705 LAFAYETTE BLDG.

PHILADELPHIA

International

MOTOR TRUCKS

FOR LOW COST HAULING

Farm Operating Equipment

INTERNATIONAL HARVESTER CO.

OF AMERICA

216-220 N. Twenty Third St.

Philadelphia



THE DAIRY LABORATORIES

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Complete Chemical and Bacteriological Analysis of Milk, Dairy Products,
Foods and Waters

FLY SPRAY TO KEEP FLIES OFF DAIRY CATTLE

Chlorine Solution to Sterilize Milk Utensils Write for information
Dr. Lee H. P. Maynard, Milk Expert H. C. Campbell, B.S., M.D., Ph.G., Chemist
Dr. H. S. Johnson, Bacteriologist Ralph Fort, Assistant
Branches at Washington, D.C. Pittsburgh, Pa. Baltimore, Md. St. Louis, Mo.

Mention the Milk Producers Review when writing advertisers

STIMULATE MILK PRODUCTION BY CAREFUL FEEDING OF COWS

Right Kind of Feeding During First Thirty Days After Calf Is Born
Increases Milk Flow Throughout Lactation Period

A dairy cow's yearly production de-
pends largely upon the conditions of
flesh at calving time and upon the feed
and care she receives during the first
six weeks after freshening.

The dry period before freshening gives
the cow a rest and tones her up. When
a cow gives birth to her calf, it is na-
ture's plan for her to produce enough
milk to feed her offspring. Man has
taken advantage of nature's plan and
by scientific feeding and care has length-
ened the milk-producing period.

The dairyman has found by experience
that an abundance of feed containing the
proper ingredients tends to stimulate
milk production. He feeds protein, be-
cause protein is the principal constitu-
ent in the casein in milk, and a cow can
not produce a large amount of milk with-
out a large supply of the right kind of
feed. Protein also makes muscle and

bring a cow into her full milk flow dur-
ing the first week following freshening.
Even though the fresh cow does not
go off her feed her digestive system may
be overtaxed and the keen edge worn off
her appetite so her milk flow is not
brought up to its maximum.

Checking up Economy of Production
When milking the fresh cow, the
dairyman continues to milk a little
longer than usual in order to stimulate
the milk secreting glands to produce
more milk. This is simply an imitation
of the calf's efforts to satisfy its appetite
and results in maintaining the flow of
milk over a relatively long period.

After the cow has reached her maxi-
mum economical production a pound or
two of grain can sometimes be taken
away gradually without the cow's re-
creasing her daily production. If the
quantity of milk decreases, a portion of



supplies other needs of the body. An-
other important reason for feeding pro-
tein feeds is that the nitrogen in protein
feeds seems to stimulate the milk-se-
creting glands to great activity when
fed liberally during the first few weeks
after freshening.

Production a Guide for Feeding

In order to take advantage of this
impulse to produce more milk, the prac-
tical dairyman weighs the grain fed to
each fresh cow daily, and also weighs
the milk she gives. He starts the fresh
cow by feeding 5 pounds daily of a
laxative grain ration. He increases the
grain ration one-half pound one day and
compares it with the pounds of milk
produced during the next two days. If
the increased amount of grain has re-
sulted in a corresponding increase in
milk, the grain is again increased on the
next day. This process is continued
and the grain increased every second
or third day, as long as the cow con-
tinues to make a profitable increase in
quantity of milk produced. The laxa-
tive feeds are gradually taken out of the
ration after a few days and grains sub-
stituted according to the need and econ-
omy of the ration.

This method of working the fresh
cow up to give a larger quantity of milk
may take from two to four weeks. The
digestive and milk secreting systems of
some cows respond to increased feed
more slowly than others. Best results
can not be obtained by attempting to

the grain taken away should be re-
placed and this ration fed as long as
the cow's milk is flow remains constant.

It is the business of every dairyman
to find the maximum economical pro-
ductive capacity of each cow in his
herd as she freshens. This is done by the
method described. It is found that the
maximum economical production of a
fresh cow is over 50 pounds daily; it
will not be difficult to keep her pro-
ducing at a 25 or 30 pound clip for the
next six months or even longer. But it
is practically impossible to stimulate
her to maximum economical production
if she is allowed to produce under her
capacity during 30 days of the lactation
period.

Farmer's Jersey Record

(Continued from page two)

ling the record Experts who have vis-
ited the farm since Dortha gave evidence
of making a record say that she bids
fair to make an even greater record on
her next trial. She is now in calf and is
expected to qualify for the AA class
in Register of Merit.

Mr. Lynn is now testing eight other
cows which are by the same sire as Pop-
py's Dortha, and they all are making
more than fifty pounds of butterfat
per month, with the highest one going
at a seventy pound clip. Mr. Lynn has
been in the cattle business all his life
but has only taken up registered stock
and test work in recent years.

The Milk Dealers' Licensing and Bonding Law in New Jersey

The New Jersey Legislature of 1917
passed a law which was introduced at
the request of the milk producers sell-
ing to city markets, providing for the
licensing of all dealers in this state or
who receive milk or cream for shipment,
sale or manufacture. The intent of the
law is to protect scattered producers
against irresponsible dealers in milk,
some of whom frequently go into busi-
ness with little capital, to a certain ex-
tent doing business on farmers' money, and
many of whom have in the past failed,
owing considerable money to producers.

Under the law every dealer in milk
"before engaging in the business of buy-
ing milk or cream shall, annually, on or
before June first, file an application with
the Secretary of Agriculture for a li-
cense to transact such business." This
application gives sufficient information
to indicate whether or not the dealer
should be exempted from the bonding
feature of the law.

The law also provides that the "Sec-
retary for Agriculture may, at his dis-
cretion, exempt from the provisions of
this act any dealers who do not make
purchases from more than two pro-
ducers, or whose total monthly purchases
of milk or cream do not exceed in value
the sum of two hundred dollars.

As this law was enacted to protect
producers, the enforcement of the law
can be greatly facilitated if all produc-
ers in this state will see to it that the
dealer to whom they sell milk or cream
has been licensed by the Department
of Agriculture or has been exempted
from such license after making proper
application for license. No difficulty is
usually encountered in securing compli-
ance with the law on the part of the
larger dealers but many of the smaller
ones have not made application to date
for a license to cover the period July
1st, 1920 to July 1st, 1921. If producers
will call the attention of the Depart-
ment of Agriculture, Trenton, N. J., to
any dealers not licensed July 1st, these
dealers will be notified.

The law provides that failure to make
prompt payments for milk purchased
with intent to defraud or purchasing
milk without license makes the pur-
chaser of milk guilty of misdemeanor.
Violations of the law will be prosecuted
when called to the attention of the De-
partment of Agriculture, and producers
should co-operate in the enforcement of
the law. Members of the Inter-State
Milk Producers Association, particularly
those selling to small dealers should
see whether their dealers have procured
the necessary license.

Sheep Raising and Wool Growers' Association

By David Kyle, New Castle, Pa.

Does it pay farmers who raise sheep
to pool their wool and market it co-
operatively through a wool growers' as-
sociation?

That question has been debated by
farmers of Lawrence county for some
time and they have proven that it does
pay, both by the success of last year's
pool and also by the faith they are plac-
ing in the proposition this year, which
is indicated by the greater number
adopting the pooling plan.

The Lawrence County Sheep and Wool
Growers' Association received the wool
from their members at their warehouse
in New Castle, July 1st, 2nd and 3rd.
Each farmer's clip was delivered, packed
in wool sacks, weighed by the associa-
tion and the grower given a warehouse
receipt for the amount of wool which
he had. Fire insurance is carried on the
wool while it is in storage. The asso-
ciation plans to hold the wool till a mar-
ket is created and a real price basis
reached.

Last year the Lawrence County Sheep
and Wool Growers' Association handled
192 clips in storage, amounting to
49,435 pounds. This year wool growers
from Butler and Beaver counties are
pooling with the Lawrence County As-
sociation. By combining the pools in
this way the rate of over-head expenses
to each farmer is greatly reduced, which,
if each were separate this expense would
be much greater. The committee esti-
mates that the pool can be conducted by
a one cent per pound charge, or less.

The association has the wool graded
by an expert grader and a statement
made of each farmer's wool, giving the
pounds of each grade which he has. The
wool is sold by the association by grades
and the farmers paid on that basis and
the expense of operation deducted by a
per pound charge.

PENNSYLVANIA MILK

TESTERS MUST BE LICENSED

One of the important laws passed by
the last session of the Legislature is that
providing for the supervision of all milk
plants where milk and cream are pur-
chased or sold on the butterfat basis.

The Secretary of Agriculture is charged
with the supervision of this law
which provides for the issuing of all
permits to all such establishments for
the purpose of record, and service after
they have passed a satisfactory exami-
nation of proficiency conducted by the
Department of Dairy Husbandry of the
Pennsylvania State College, and fur-
nished evidence of good character. These
licenses must be posted in plain view
in the testing room. Plans for joint
work are now being formulated by the
Department of Agriculture and the
Pennsylvania State College.

Permits and licenses are issued for
one calendar year, and must be renewed
annually. The Secretary of Agriculture
has authority to revoke both permits
and licenses for cause.

The permits are issued without charge
to the milk plants, but an examination
fee of \$3.00 is charged by the Pennsylv-
ania State College to all applicants
for the position of testing, and a fee of
\$2.00 is charged by the Pennsylvania
Department of Agriculture for issuing
the license.

All examinations will be certified to
the Department of Agriculture by
Pennsylvania State College before li-
censes are issued. Provision is also made
for check work by State Testers under
the direction of the Secretary of Agri-
culture, who will, from time to time,
check the work of local testers.

Provision is also made for the in-
spection and approval by the Bureau
of Standards of the Department of In-
ternal Affairs, of all glassware used in
testing.

This law assures both producer and
dealer of a square deal, and will in a
great measure relieve the accusation of
faulty testing.

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ent, Poultry Preparations, Silver Pine Heal-
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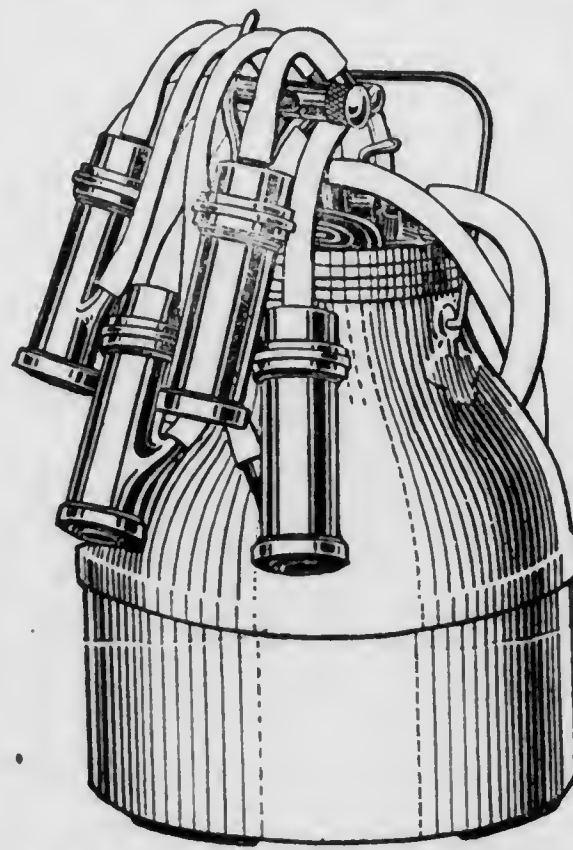
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By Clyde L. King

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INTER-STATE

Milk Producers Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE INTER-STATE MILK PRODUCERS ASSOCIATION, Inc.

VOLUME I

WEST CHESTER, PA., AND PHILADELPHIA, PA., SEPTEMBER, 1920

NUMBER 5

AUGUST MILK CONDITIONS STOCK SHOW AND FAIR AT NESTVED, DENMARK

Weather Conditions Favor Production A Trying Month

Weather conditions during August were extremely unfavorable, on the whole, to the general marketing of milk by producers. General conditions were quite favorable toward production, but the principal trouble has been in maintaining milk in salable condition on delivery.

The continued hot weather, with high humidity, has been particularly favorable to the growth of bacteria in milk, with a resultant large increase in the amount of sour milk. In many cases we have been able to observe that the temperature of springs and even well water has been considerably higher than under normal conditions. This was probably not observed by many farmers using spring or well water for cooling their milk and while they believed they were cooling the milk as usual, in reality it was starting for the receiving station five to ten degrees warmer than usual, and with transportation conditions, unless in ice cars, highly unfavorable, owing to the same general weather conditions the proportion of sour milk received at delivery points was relatively large.

Early in the month milk receipts were above normal. Intermittent rains had been favorable to pasture growth and also acted as a retarding influence on the usually prevalent fly. The milk flow was, if anything, larger than anticipated. At this time surplus milk, on the receiving platforms, went begging and sold down, at times, to eight cents a quart.

During the middle of the month there was a large increase in the amount of sour milk received. At times this was so large as to result in a scarcity of sweet milk, and, for a few days as high as 11 and 12 cents a quart was bid on the city platforms for milk sufficient to enable the smaller dealers to meet the demands of their trade.

In the latter weeks of the month, when more normal weather conditions pre-

valued, the market again approached normal. Less sour milk came out and the supply of sweet milk increased steadily. At the close of the month there was a considerable surplus with prices on the platform one to two cents a quart under the recognized price level.

By Robert W. Balderston

Three or four of my impressions seemed to be so outstanding as an American visitor at this fair, that I will enumerate them first of all and then discuss each briefly.

1. The Danes have developed their breeding along utility lines primarily

The Danes have wisely standardized their breeding, concentrating their energies on two breeds. One, the black and white, being practically identical with the Holstein breed in this country. This breed is found mostly on the mainland of Jutland. The other breed, the Red Danish Dairy Breed, is of the short legged type, with good depth of

barrel and great constitutions. This breed is almost universal on the islands and was the only one exhibited at the Nestved show.

All animals in the show are scored by the judges, on a basis of 100 per cent. and premiums awarded in accordance with the average made and not on a basis of the number of prizes to be awarded or the number of entries in each class.

Sixty per cent. of every score is calculated on a basis of performance and 40 per cent. on individual conformation.

Notwithstanding the emphasis placed on performance, there is a remarkable uniformity in these cattle, as may be noted in the illustrations. There are always experts around to demonstrate the points of the animals; in addition each score card containing memoranda and comment is posted over each animal.

The sales made at these shows are one of the strongest features. The Bull Club members come here to purchase the co-operative head for their herds. Sales are generally arranged with a sliding scale of prices. A flat price at once and a substantial additional amount if the animal wins a premium.

The hogs shown are either English Yorkshires or the heavy White Danish. The usual practice of growing for pork is to cross Yorkshire boars with Danish sows. The former give quickness of development to the progeny and also insure a high grade bacon. The latter are robust, prolific mothers and attain very large size.

The Nestved Fair is one of a large number held each year throughout the

(Continued on page seven)



DISTINGUISHED SPEAKERS AT FARMERS' PICNIC, WEST CHESTER, PA., MONDAY, AUGUST 23rd
Left to right: P. M. Sharples, Congressman Thomas S. Butler, West Chester, Pa.; Wallace MacMonnies, Jersey Bulletin, New York; James E. Dodge, President Berkshire Breeders' Assn., Lowell, Mass.; James G. Watson, Secretary Ayrshire Breeders' Assn.; Hugh G. Van Pelt, editor The Dairy Farmer; Morris T. Phillips, President Chester County Livestock Breeders' Association, Pomeroy, Pa.; Frederik Rasmussen, Pennsylvania Secretary of Agriculture; E. T. Meredith, Secretary of Agriculture, Washington, D. C.; D. S. Adams, County Agent of Chester County, Pa.; M. D. Munn, President National Dairy Council and President American Jersey Cattle Club, Minneapolis, Minn.; F. P. Willis, President Inter-State Milk Producers Association, Ward, Pa.; Robert Scoville, President American Guernsey Cattle Club, Taconic, Conn.

There has been a decided weakness in the butter market, particularly during the first three weeks of the month. With the market weak buyers were only taking quantities sufficient for current needs and prices ruled low. Large quantities of Holland and Danish butter which had recently been received, held the market down, while domestic production was above normal. Foreign butter still continues to arrive. Late in the month 3500 casks of Danish and 8580 boxes of Argentine butter were placed on the Eastern markets. Indications favor decreased importations next month, it is stated.

The average price for 92 score, solid packed creamery butter, New York city, for August, was 55 cents. The top price of the month was 57 cents, while

(Continued on page eight)

THE UDDER AND MILKING

With a Few Remarks On Tuberculosis*

By Louis F. Dilger

The art of milking dairy cows of superior merit is an accomplishment of which relatively few persons can boast. Therefore, a few remarks on this subject may not be out of place here, because as a rule a great many valuable cows are ruined yearly by careless milking, owing to the lack of knowledge concerning the udder, its functions and its care.

The udder is composed of two glands which are separated from each other by a fibrous partition and enveloped in a white glandular milk capsule. A reverse partition divides the rear half from the front half, thereby forming the four quarters. The milk glands are made up of glandular vesicles, in which the milk is collected through small canals which unite with the larger canals, called the lactiferous duct, and these lead into larger cavities, known as the milk cistern, and one of these is located directly over each teat. On the lower part of each teat is a ring-shaped sphincter muscle which automatically prevents the escape of the milk. The milk does not originate simply through the secretion of the blood, but represents the transformed fluid of the glandular organs. In order to obtain the greatest quantity of milk from the lacteal gland it requires a pressure of the hand on the upper part of the milk cistern. The pulling on the teat not only causes an unnecessary prolongation of the stroke, but is the origin of diseased udders. The operation of milking is a very difficult thing to describe in writing. It should be done with a dry and full hand. In this way a larger quantity of milk is won and the work may proceed more rapidly than when the thumb and index finger are used in pulling downwards. This so-called stripping should never be applied, as it results in diseased and spoiled udders. This pulling of the teats causes small rifts in the tender mucous membranes of the milk cistern and the teat canals, which is the origin of the little knots which form inside and give no end of trouble, and in the majority of cases either spoil the one teat, or as it frequently happens, all four. The kneading and mudding of the udder in order to entice the secretion of milk is worthy of recommendation, and no better example is afforded us in this respect than the sucking calf.

The milking should be performed regularly, steadily and uninterruptedly, without intermission, until the teats are thoroughly milked out. Any unnecessary pause in the milking may cause loss of milk. To be able to carry out this conscientiously, the operator must have a long practice, strong, muscular arms and hands, because there is no piece of work which taxes the muscles so heavily as milking, especially when it is thoroughly and carefully done. The skilled milker when he is to be found is a priceless gem, for upon him depends the future of the udder and cow. There are many rules in force which describe the art of milking and I have always found them very useful, and if we can succeed in our profession

without spoiling the udder and producing hygienic milk we may then call ourselves masters of our job, but both in themselves require the greatest care and pains.

Cleanliness above all things, and this should never be lost sight of if we mean to become masters of our trade, and produce milk which is fit for human consumption. Did you ever see a surgeon before examining a patient or before an operation wash his hands? This is the identical thing that a milker should be made to do before he sits down to milk a clean, healthy cow. In milking the first strokes should not be milked in the milk bucket, on the hand or on the floor, as no end of harmful germs are floating about in these strippings which disseminate disease. It is, therefore, necessary and of the utmost importance that the first strokes should be milked into a separate pail, which should be cooked when intended for use, whether for the household or for farm animals. That the first part of the milk is alive with bacteria is an established fact, and by the aid of microscopic examinations was found to contain as high as 80,000 bacteria to every cubic centimeter, while the last part of the milk was found to be perfectly germ free. These bacteria penetrate before milking through the opening of the teat and extend far up into the teat canals. Dairy men and farmers who desire to produce wholesome milk must bear in mind the importance of keeping these first strippings separate, especially so where a perfectly germ free product is to be won, and where it is intended that the milk be consumed in the raw state. It is a deplorable thing that we have not reached that state of perfection in producing milk which may be used without risk directly from the cow. However, I believe the time is not far distant when we shall be able to enjoy that pleasure.

It has been said that the milk which is yearly supplied to many large cities and consumed by the inhabitants contained enough cow dung to fertilize a good day's work of potatoes.

It should be the duty and ambition of the dairyman and every one who is fortunate enough to be blessed with owning a family cow to endeavor to produce milk of the highest standard, and by producing such a superior quality of milk, he will be placing himself as well as the community in which he resides on a higher point in the scale of humanity. The importance of thoroughly airing the stable before the cows are milked is paramount and this should be done at each milking. The cleanest milk and that which is mostly free of bacteria is produced from cows which are milked in the open air, and it is a great pity that this is not done where it is practical to do so. Cows accustomed themselves to being milked out of doors as readily as they do in the stable, and where they are kindly handled there is very little trouble, if any, to get them to stand quietly when being milked. As a matter of fact, I have seen cows milked in a lot conveniently connected with the dairy reported promptly at the

SOME REASONS WHY

The Dairy Farmer Should Belong to the Cow Testing Association

By County Agent E. P. Walls, Talbot County, Md.

It is just as impossible to tell how much butter fat milk contains by looking at the milk or by looking at the cow as it is to tell whether or not the kernels on an ear of corn will grow when planted. There are people who think that they can form a pretty correct estimate in either one of these cases, but too much work has been done over a great number of years in practically every part of the world, on these things, to allow us to still think that anyone possesses such supernatural powers. In fact, we do know now that it can't be done. We also know that the only way of telling how profitable a cow is, is by knowing how much she eats and what it costs and then using the Babcock test and the scales to determine of how much value is the milk that she produces.

Occasionally a man will make this argument. That he can buy a small Babcock tester and test his own milk and know just as much about it as if he belonged to a cow testing association. In a good many cases this is true, if he would only do it, but it would be rather hard to guess the number of once used and now disused small Babcock testers which are lying around over the farms of this country. A man will get a testing outfit, use it for a month or two and then when the next time comes will be so busy with other farm work that he will let the test go by from day to day and the first thing he knows he is out of the testing game. If he is a member of a cow testing association it makes no difference whether he is busy with his other work or not, the cow tester will be there each month and the work will be done, as this is his job. He has time to complete the records and to figure out much very valuable data in regard to each cow in the herd. In a few months he is able to tell the dairyman how to begin culling his cows judiciously, getting rid of those which are not paying their keep or are returning a very small profit and buying in other cows of known merit to take their places. In addition to the immediate return gotten from more milk and more butter fat the farmer knows which cows to use as his breeding stock, because the old fundamental law of breeding that "like begets like" still holds good in a great measure, and can usually be depended upon. Therefore, it is reasonable to expect that dairy animals coming from a line of ancestors which are large producers of a good quality of milk are going to be better producers than are animals which have ancestors of no record.

Then, too, the cow tester is able to figure out with the farmer, based on the feeds which he is using, dairy rations for the several cows in the herd which will make their production most economical. Some members of the cow testing association in Talbot county have stated that in this way the tester has saved them enough on their feed bill in one visit to pay for the testing of their herd for a whole year.

One of the most interesting stories heard of recently in connection with cow testing association work is that of a Missouri dairyman who was milking 50 cows about a year ago. He joined the cow testing association and as a result of these tests got rid of 26 cows and finds by accurate records that he is making more profit from the remaining 24 than he formerly did from 50.

Another argument in favor of cow testing work is that in addition to the matter of immediate profit and the selection of better breeding stock, it furnishes the very cheapest form of advertising for those farmers who are raising registered stock and which either have or will soon have offspring for sale. Intelligent dairymen have now reached the point where the first thing that they want to know about a dairy animal is what she has made on test or what the percentage of such an animal has shown by cow testing records in the past.

Closely coupled up with the value of cow testing work is the matter of tuberculosis eradication. If a farmer once gets a herd which is entirely free of tuberculosis and in a good healthy condition, and in addition to this obtains the information which he can get through cow testing work on his herd, he is then certainly in a good position to go forward rapidly with the development of that herd and with the attendant increase in proceeds which are bound to result.

Hand in hand with these matters of a clean herd and a high testing herd goes the question of the most economical production of feed on the farm. It is a very common thing if a man becomes interested in one phase of dairying that he naturally becomes more interested in all the other phases including the erection of silos and the growing of crops to fill them, the production of more valuable hay crops such as alfalfa, cow peas and soybeans, and in short, the marketing of a larger proportion of the crops grown on the farm in the form of milk. The manure made from the feeding of good dairy rations and the keeping of an adequate herd of cattle in proportion to the size of the farm, is a great factor in the increase and maintenance of soil fertility which is probably one of the most serious and important problems confronting the country today. It is a well-known fact that land in a good state of fertility will make good yields of almost any crop. It is also another well-known fact that in those sections where are given over largely to dairying the soil fertility is kept up to a high mark, the farmstead is generally well-improved, and presents an excellent appearance, and the proprietors of those farms generally have money in the bank.

Testing seed before planting is like taking out insurance on your crop.—Try it.

The more milk the less meat.

(Continued on page six)

*From Holstein Friesian Register

COUNTY ACTIVITIES. MANY LOCALS HOLD PICNICS

CHESTER CO. FARMERS PICNIC

County Pure Bred Live Stock Association Formed.

Under the auspices of the Chester County Farm Bureau, Pomona Grange, No. 3, and the Chester County Live Stock Breeders' Association, the farmers of Chester county held a very successful picnic at Lenape Park, near West Chester, Pa. Fully a thousand farmers from Chester and nearby counties attended.

A number of men of national prominence were in attendance and made addresses.

Secretary E. T. Merideth, of the United States Department of Agriculture, made an interesting address saying in part, "that the farmers should appreciate the valuable work done by the Department of Agriculture." He appealed to all farmers to use the information given out by the department as a result of its expert investigations. He outlined plans for the future and asked the farmers to personally make their Congressmen understand the desires of their constituents regarding full appropriations for the work of the department.

The secretary laid special emphasis on the great aid that has been given for improved marketing facilities for American farmers. He said that production of all farm products had been increased and improved, without proper regard to the conditions under which the farmer must sell it. He pledged the assistance of the department in organizing national marketing facilities that will insure improved conditions.

Prof. Hugh G. Van Pelt, of Iowa, emphasized improved care of dairy animals. It is not worth while to carry on improved breeding, without improved care and good feeding.

M. D. Munn, president of the National Dairy Council, in a brief address, voiced the need for the co-operation of all dairy interests in pushing the consumption of all dairy products. Among others present, who also made brief addresses, were Robert Schoville, president of the Guernsey Breeders' Club; James E. Dodge, president of the Berkshire Breeders' Association; John McSparran, master of the Pennsylvania State Grange; James Watson, president of the Ayreshire Breeders' Association. Frederick Rasmussen, secretary of Agriculture for Pennsylvania, presided and introduced the various speakers.

BREEDERS' ASSOCIATION RECENTLY FORMED

At a business meeting during the morning the Chester County Pure-Bred Live Stock Breeders' Association was formed. The members pledged themselves to use none but pure-blooded sires for their herds. Committees were appointed to make a live stock survey of the county to ascertain the number of heads of pure-bred stock of all descriptions.

Officers of the association elected were Morris T. Phillips, of Pomeroy, president; Dale E. Andrews, of West Chester, vice president; Albert W. Hoopes, of Highland Farms, West Chester, secretary; and Roland Smedley, of West Chester, treasurer.

BERKS COUNTY FARMERS PICNIC

The Berks county farmers held a very successful picnic at the Fair Grounds in Reading, Pa., on Thursday, August 12th, under the auspices of the Farm Bureau and the Inter-State Milk Producers Association locals of Berks county.

Upwards of 4,000 people were in attendance. A basket dinner was served. The Ringgold Band, of Reading, furnished music during the day. Various games and contests were engaged in. Several snappy horse races were also held.

Shortly after dinner an educational program was held at which addresses were made by the following:

Frederick Brenkman, secretary of the State Grange; E. K. Hibshman, State Leader of Farm Bureaus; John H. Vorhees, associate editor, The Pennsylvania Farmer, and H. D. Allebach, vice president, The Inter-State Milk Producers Association.

Following the meeting plans were made for the formation of a county association of the local branches of the

MONTGOMERY COUNTY (PA.) PICNIC

The first farmers picnic, held under the auspices of the Montgomery county Farm Bureau and the local organization of the Inter-State Milk Producers Association, in that county, was held at Schwenksville Memorial Park, Schwenksville, Pa., August 11th. The attendance numbered fully 2,000.

I. H. Halderman, president of the Montgomery County Farm Bureau, opened the formal exercises and introduced H. D. Allebach, vice president of the Inter-State Milk Producers Association, as chairman of the day.

Addresses were made by A. B. Small, of Ohio, who spoke on the value of the pure bred Holstein cow to the dairy industry. Wm. H. Shively, of Lancaster, Pa., made an address on the value of the Farm Bureau organization.

Frederick Shangle, treasurer of the Inter-State Milk Producers Association, spoke on the value of organization and co-operative work, particularly in connection with the work the

MONTGOMERY COUNTY HOLSTEIN BULL ASSN.

At a number of meetings of the Zieglerville, Pa., local of the Inter-State Milk Producers Association, the question of organizing a Pure Bred Bull Association was discussed.

It was felt that herd improvement was just as important a factor in the dairy business as campaigns for higher milk prices. Meetings in the spring and summer of 1919 finally culminated in sufficient interest to form two blocks. Later further meetings were held and resulted in subscriptions for four additional blocks to be secured.

At a general meeting last fall, the value of shares in the Bull Association was fixed at \$15. Seventy shares were necessary for a block to constitute the ownership or use of one bull.

In the early part of December, 1919, a committee, consisting of three members, together with R. R. Welch, of State College and A. K. Rothmberger, extension representative for Montgomery county, went to Ohio and selected six bulls. Later two more blocks were organized and bulls purchased. Plans for the organization of additional blocks are now under way.

Efforts are made to obtain as high grade bulls as money can buy. In addition to type, efforts towards obtaining bulls from high butter fat lineage is paramount. Breeding was also considered to the extent that all of the bulls bought should be along the same family line, but not so closely related as to result in inbreeding.

At a recent Montgomery county farmers picnic, held at Schwenksville, Pa., a number of bulls of the association were exhibited. A reproduction of a photograph taken at that time is shown. Reading from left to right these bulls are King Pontiac Diana De Kol; sire, King Pontiac Diana Pietertze; dam, Maple Crest De Kol Girl, with a record of 14,293 pounds of milk and 654.43 pounds of butter; King Pontiac Pondyke, 279169, sired by King Pontiac Hengerled Pondyke; dam, Maggie Artis Segis, year butter record, 1,014.91 pounds; Sir Aggie Segis Corniciopia, 290976; sire, Model Segis Butter Boy, dam Aggie Corniciopia of Sunny Side, milk 19,091 pounds, butter 833.94 pounds. No. 4, unnamed bull, sired by Maple Crest Pontiac Herzog, with 32 A. R. O. daughters; dam, Klorian Funderline, of Ferndale, now on

(Continued on page eleven)



Pure Bred Bulls—Montgomery County Association

Inter-State Milk Producers Association, of Berks county, which promises to meet with great success.

OXFORD (PA.) PICNIC

The Oxford, Chester county, Pa., local of the Inter-State Milk Producers Association, held a farmers' picnic at Oxford, Pa., Thursday, August 26th. Several hundred members and their friends were in attendance. Following a basket dinner addresses were made by various speakers including Mr. Wm. Grisco, of Abbot's Alderney Dairies, who spoke on the care of milk and the production of milk of better grade.

Thomas McDowell spoke on the good roads improvement in Chester county; Frank P. Willits, president of the Inter-State Milk Producers Association, made an address on organization and co-operation, particularly along the lines of the association work. A. P. Irwin made an address on good roads and what could be accomplished by organized effort. H. D. Allebach, vice president of the Inter-State Milk Producers Association, spoke on the general milk market situation and the value of milk as a food.

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INTER-STATE
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Inter-State Milk Producers Assn., Inc., Publishers
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I hereby subscribe to the Inter-State Milk Producers Review, at the rate of 50 cents per year, in advance.

Signature.....

Date..... P. O. Address.....

Number..... Local

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Application for entry as second class
matter is pending.

Editorial

A great many of the Locals of the
Inter-State Milk Producers Association
are following the policy of maintaining a
close organization. We commend them
for it and urge its continuance.

Many, however, and these are probably
in the majority, follow a policy of
leaving well enough alone. One or more
members are expected to carry the load,
do the business of the local and in most
such cases a waiting policy prevails. That
is nothing is done until some trouble
develops, and as a result no one is in
touch with the situation and things that
could and ought to have been done to
obviate the trouble were left undone.

Such policies we regret as they are
inconsistent with the good working in-
tentions of the association.

Much can be said in favor of the
active local. It not only brings the
dairy farmer closer together, but broad-
ens the knowledge regarding the vari-
ous phases of the milk situation. Vari-
ous topics, as they occur are brought
to the attention of the dairyman and
he profits by them. Quite a few of our
Locals hold monthly meetings when, in
addition to milk matters, other topics of
community interest are taken up and
considered. In some sections cow test-
ing associations, bull and hog associa-
tions have been developed and are
thriving.

Every local should be brought to 100
per cent. membership in its community.
Get under the skin of the fellow who
is riding on your wagon; gathering the
benefits, but not sharing the cost. Urge
him to pay his own way.

You all know that the stronger you
are the more effective the result when
you go after anything. Get busy on
this, go after your non-member neigh-
bor now and get him in line.

There's another reason why you
should do this now. The annual meet-
ing of the Inter-State Milk Producers'
Association, your association, will be

held in Philadelphia early in December.
Elections for directors will be held. You
want to be represented. Therefore get
your locals working, have several dele-
gates elected to represent you, if you
cannot all come. We would be glad
to have you all, but we know that's next
to impossible, but at least send a dele-
gation, let them have voting proxies for
those of you who cannot come, and
then let them come back home and tell
you what a live wire organization you
have.

We want to emphasize that the Inter-
State Milk Producers' Association is
your own association. You elect the di-
rectors who carry on its business. Every
share of stock has a right to vote and
we want to have you elect representa-
tive men to conduct your affairs in a
business way and to your satisfaction.
Therefore get busy now. Get your local
in working order and prepare to send
delegates to the annual meeting and of
equal importance, put yourself, through
your local, in a position to obtain all the
benefits of the co-operative value of
association work.

"Watch Your Step." The days we
have such sudden changes in production
losses and in marketing conditions that
it is fatal to assume that we can pro-
duce milk profitably at the selling price
of one year ago, or one month ago be-
cause, at that time, it was profitable.
Don't look on an increase in selling
price as so much velvet and proceed to
expand your business abnormally. On
the other hand, don't get mad because
some temporary or seasonal price re-
duction and sell off profitable cows at
sacrifice. Let business run along regu-
larly and balance books carefully on
an annual basis.

Farmers are proverbially impulsive
and unwilling to stop and figure. Last
spring potatoes sold for \$6 per bushel
and as a result some farmers doubled
their normal acreage. Now we know
and every farmer knows, in our own
hearts, that it was not the expectation
of abnormal profits but the lure of the
unusual price at the tail end of 1919
it was this alone which induced them
to make a sudden plunge of this kind,
and doubtless a very low price or so
along about next spring will have the
opposite effect on the crop planning for
next year.

So—watch your step—watch your
books, particularly your cow testing as-
sociation books and govern your policies
accordingly. With the farm labor sup-
ply at the lowest ebb, both as to quantity
and quality and what little there is de-
manding the highest prices yet known,
there is no excuse and no place for the
"beater cow" and your accounts will
very likely surprise you by showing up
a lot of them that were once good money
makers.

The present situation, critical as it is
may, in the end be a real Godsend be-
cause it will force better business meth-
ods on us all. Watch your step—and
don't be the one to get crowded out by
unsound policies and practices.

But there is another slogan that will
be worth considering: "Move up for-
ward—plenty of room up front." Never
was there a better prospect for the in-
telligent dairyman. The day is past for
the dairyman who could grind a living
and a bank account out of the lives of
his wife and children regardless of fi-
nancial production costs. There's plenty
of room up front—but watch your step!

BOARDS OF HEALTH WATCH- ING SOURCE OF MILK SUPPLY

We have frequently referred to the
necessity of observing greater care and
cleanliness in the handling of milk. That
the laxity of some producers would
force regulations, through the Boards
of Health, under which milk for public
consumption would have to be produced.
The public is generally willing to pay
the price but want a clean, sweet, pure
article in return.

We now hear whisperings that some
buyers are disposed to aggressively look
after the source of their supply.

Under the Philadelphia Board of
Health regulations a barn score is pro-
vided, but has not heretofore been en-
forced.

Look after your own interests. Look
after your herd. Make milking condi-
tions sanitary. Keep your surroundings
clean. In fact, save yourself trouble
by taking time by the forelock. Should
the barn score be enforced it would in-
volve considerable trouble to meet its
requirements and those who did not con-
form to its regulations would be pen-
alized in conformity with the percentage
of their failure to meet its conditions.

BALTIMORE MILK PRICES ARE INCREASED

At a meeting held in the offices of the
Maryland State Dairymen's Associa-
tion, on Friday, August 27th, between
representatives of the Milk Buyers' Ex-
change and the State Dairymen's
Association, with Dr. Clyde L. King,
Milk Arbitrator, and Miss Chalmers,
of the Women's Civic League, represent-
ing the consumers, present, it was agreed
that the price of milk for September be
increased two cents per gallon to the
producer, the price to the consumer to
remain the same, namely, sixteen
cents (16c), per quart. The price of
pints to the consumer was increased
from nine to ten cents, as the cost of
bottling a pint of milk is almost as
great as of a quart. If the consumers
could be induced to purchase their
supply in large quantities the cost of
distribution would be lessened.

The report of Dr. King to Mr. Wm.
H. Killian, chairman of the Fair Price
Committee, of Maryland, received a
great deal of favorable comment, show-
ing as it does the increased cost of
dairy feeds since 1913 and the relative
price of milk during that time. This
report is accompanied by a chart show-
ing that feed has maintained a higher
level than milk since 1913, and explains
that labor also has greatly increased,
making the cost of producing milk
greater than the increased price re-
ceived for it. The price of dairy feeds
alone have increased 157% since 1913;
milk has only increased 123%.

The supply of milk in this territory
has increased in the past few weeks
because of the good pastures, due to
the abundant rains during August, and
don't be the one to get crowded out by
unsound policies and practices.

The demand for milk has also in-
creased, leaving the supply only a little
in excess of the demand.

D. G. HARRY,
President Maryland State
Dairymen's Association.

If milk came in medicine bottles you
would gladly pay a dollar a pint.

CONDENSERIES COMPLAIN OF PRESENT PRICES

As we go to press a conference has
been called for September 7th by the
manufacturers of condensed milk pro-
ducts in this district, who contend that
under existing conditions they are un-
able to pay current prices and break
even. The condensed milk market has
been in a very unsatisfactory condition.

The conference will include represen-
tatives of the condensed milk manu-
facturers, dealers and the officers and
executive committee of the Inter-State
Milk Producers Association.

NEW YORK MILK MARKET

The room mapped out at the May
meeting of the Dairymen's League and
the Conference Board continues to be
carried out. August milk was \$3.35 p r
hundred for 3 per cent. milk in the
200 mile zone. The price for Sep-
tember milk was agreed upon at the
same time: being \$3.65 per hundred for
3 per cent. milk in the 200 mile zone,
representing an advance of 30 cents a
hundred over July.

Prices for the future are to be ar-
ranged for at a further conference dur-
ing the present month.

DIRECTORS' MEETING

The directors of the Interstate Milk
Producers' Association were called in
meeting at the offices of the association,
Hed Building, Philadelphia, Monday,
August 16, for the transaction of gen-
eral business.

Details regarding the general milk
situation were discussed at length and
the action of the executive committee, in
connection with milk prices, under a
resolution passed at the last meeting of
the directors, was approved.

The directors also approved the vari-
ous accounts, covering expenditures
since the June meeting, which had been
approved by the executive committee.

A financial statement, showing the
available assets of the association, as
of August 14, was presented and ap-
proved. Your association is growing
in number of members and has a sub-
stantial cash working account.

A report was presented in connec-
tion with the publication of the Inter-
State Milk Producers' Review, show-
ing the official organ of the associa-
tion to be growing steadily and that
the prospects for advertising during the
coming season was favorable. Numer-
ous reports have been received showing
the paper to be meeting with general
favor. Editorially and from a news
standpoint it appears to be filling a long-
felt want in this district.

The volume of business being trans-
acted from day to day, through the of-
fice, in behalf of the association's mem-
bers, in advertising the food value of
milk and milk products, etc., has largely
increased and has taxed the present of-
fice facilities. Plans were directed to-
ward increased office space.

The directors also authorized a two-
day session for the annual meeting in
December, and directed the executive
committee to make the necessary ar-
rangements.

H. D. Allebach, vice president, who
has been acting as secretary during the
leave of absence granted Secretary R.
W. Balderston, was given a vote of
thanks for the efficient conduct of busi-
ness during the period of Mr. Balder-
ston's absence.

LATEST MARKET PRICES

Philadelphia Milk Prices

PRICES F. O. B. PHILADELPHIA

Test	Price	Basic	Price for all
Per cent.	per 100 lbs.	Quantity	milk above
		per quart	the Basic
3.1	\$4.20	9.1	6.1
3.2	4.24	9.2	6.2
3.3	4.28	9.3	6.3
3.4	4.32	9.4	6.4
3.5	4.36	9.5	6.5
3.6	4.40	9.6	6.6
3.7	4.44	9.7	6.7
3.8	4.48	9.8	6.8
3.9	4.52	9.9	6.9
4.0	4.56	10.0	7.0
4.1	4.60	10.1	7.1
4.2	4.64	10.2	7.2
4.3	4.68	10.3	7.3
4.4	4.72	10.4	7.4
4.5	4.76	10.5	7.5
4.6	4.80	10.6	7.6
4.7	4.84	10.7	7.7
4.8	4.88	10.8	7.8
4.9	4.92	10.9	7.9
5.0	4.96	11.0	8.0

When milk is not tested the price f. o. b.
Philadelphia is 10 cents per quart

RECEIVING STATION PRICES

Quantity	Price	Price per 100 lbs.
per 100 lbs.	per 100 lbs.	surplus milk at all
		receiving stations
Miles	Test %	Test %
1	\$3.74	3.1
2	3.78	3.1
3	3.82	3.1
4	3.86	3.1
5	3.90	3.1
6	3.94	3.1
7	3.98	3.1
8	4.02	3.1
9	4.06	3.1
10	4.10	3.1
11	4.14	3.1
12	4.18	3.1
13	4.22	3.1
14	4.26	3.1
15	4.30	3.1
16	4.34	3.1
17	4.38	3.1
18	4.42	3.1
19	4.46	3.1
20	4.50	3.1

Freight rates on basic milk deducted on
a basis of 46 quarts—112 per cent. of 40
quarts, plus 3 per cent. war tax. Four-tenths
of a cent added or deducted for each tenth
of one per cent. butter fat above or below
3 per cent.

September Milk Prices

Quantity	Price	Basic
per 100 lbs.	per 100 lbs.	Quantity
		per 100 lbs.
Test	Price	Price
Per cent.	100 lbs.	per quart
3.1	\$4.20	9.1
3.2	4.24	9.2
3.3	4.28	9.3
3.4	4.32	9.4
3.5	4.36	9.5
3.6	4.40	9.6
3.7	4.44	9.7
3.8	4.48	9.8
3.9	4.52	9.9
4.0	4.56	10.0
4.1	4.60	10.1
4.2	4.64	10.2
4.3	4.68	10.3
4.4	4.72	10.4
4.5	4.76	10.5
4.6	4.80	10.6
4.7	4.84	10.7
4.8	4.88	10.8
4.9	4.92	10.9
5.0	4.96	11.0

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RECEIVING STATION PRICES

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per 100 lbs.	per 100 lbs.	Quantity
		per 100 lbs.
Test	Price	Price
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3.2	4.24	9.2
3.3	4.28	9.3
3.4	4.32	9.4
3.5	4.36	9.5
3.6	4.40	9.6
3.7	4.44	9.7
3.8	4.48	9.8
3.9	4.52	9.9
4.0	4.56	10.0
4.1	4.60	10.1
4.2	4.64	10.2
4.3	4.68	10.3
4.4	4.72	10.4
4.5	4.76	10.5
4.6	4.80	10.6
4.7	4.84	10.7
4.8	4.88	10.8
4.9	4.92	10.9
5.0	4.96	11.0

When milk is not tested the price f. o. b.
Philadelphia is 10 cents per quart

Prices for milk above basic quantity based
on 120 per cent. of the average monthly or
semi-monthly price of solid packed 92 score
creamery butter, New York City. In May,
June and July an increase of 10 per cent.
and in August an increase of 5 per cent. in
the basic quantity of milk shipped is al-
lowed.

SURPLUS BASIS PRICES

4 per cent. milk at all receiving points	First half	Average
	per month	per month
January	\$3.16	\$3.12
February	3.20	3.18
March	3.24	3.19
April	3.28	3.23
May	3.32	3.27
June	3.36	3.31
July	3.40	3.35
August	3.44	3.39

SEPTEMBER COMPARATIVE

PAID PRODUCERS

Eastern Territory

4 per cent. butter fat, per 100 pounds

Basic

Philadelphia, 50 mile zone \$4.01

New York, 200 mile zone 4.05

Pittsburgh, outlying points 3.75

Baltimore, per gallon f. o. b. 4.40

RETAIL MILK PRICES

Pasteurized and bottled

Subject to Board of Health Regulations

Grade B or Market Milk

Quarts

Pints

Philadelphia 15 9

New York 16 10

Pittsburgh 16 10

PRICES PAID PRODUCERS

f. o. b. dealers station

And retail selling prices, Market Milk, nearby

cities and towns

Quarts

Pints

Philadelphia 15 9

New York 16 10

Pittsburgh 16 10

PRICES PAID PRODUCERS

f. o. b. dealers station

And retail selling prices, Market Milk, nearby

cities and towns

Quarts

Pints

Philadelphia 15 9

New York 16 10

Pittsburgh 16 10

PRICES PAID PRODUCERS

f. o. b. dealers station

And retail selling prices, Market Milk, nearby

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Quarts

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Pints

Philadelphia 15 9

New York 16 10

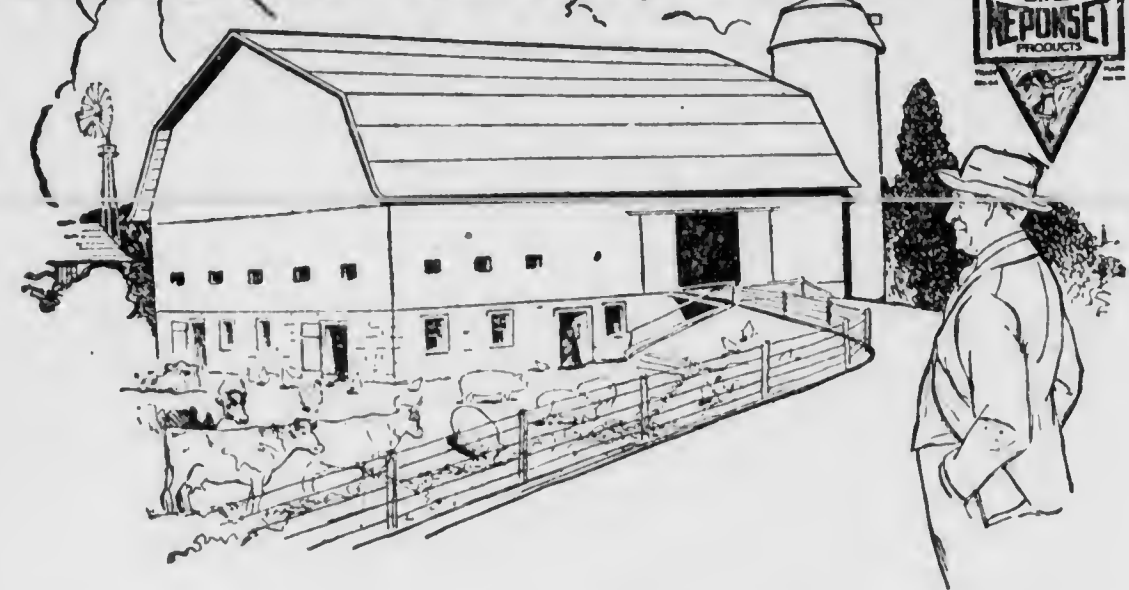
Pittsburgh 16 10

PRICES PAID PRODUCERS

f. o. b. dealers station

And retail selling prices, Market Milk, nearby

NEPONSET ROOFS



The Yardstick of Roofing Value.
What is it? It's the cost per square foot per year of service

It doesn't pay to gamble with roofings. You won't gamble if you buy Bird's Neponset Paroid for that new roof of yours. For more than 20 years it has proved its worth. If your dealer cannot supply you right out of his stock, we will ship you direct.

BIRD & SON, inc. (Established 1795) East Walpole, Mass.

THE THREE-QUARTER TON INTERNATIONAL MODEL H Is the Ideal Farmer's MOTOR TRUCK

It will carry a ton anywhere. It has a speed of 20 miles per hour. It is built throughout by the International Harvester Co., of America, whose reputation for fair dealing has earned for them one of the largest business in the world today.

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S. W. Lee.....	Oxford, Pa.
Willis Gill.....	Cochranville, Pa.
M. D. Smith.....	Coatesville, Pa.
John McGowan & Son.....	Downingtown, Pa.
H. J. Bachman.....	Elverson, Pa., R. D.
Herbert Hansell.....	Onkmont, Pa.
Simmons & Barrow.....	Lansdowne, Pa.
Chas. Wirrlow.....	Meda, Pa.

See your nearest dealer for demonstration and literature.

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS

THE UDDER AND MILKING

(Continued from page two)

accustomed hour of milking as regularly as clockwork and from my experience the cows preferred it to being put in the stable. Cows standing in sweaty, damp stables and fed on poor, weakening foods are all causes which are attributable to the production of unwholesome milk and propagation of tuberculosis.

The udder is an organ subjected to all kinds of diseases, owing to its highly sensitive structure, and unless we possess a thorough knowledge of this magnificent work of nature we can never learn or expect to appreciate its functions nor understand its care in order to keep it in a healthy working condition. I believe the cause of more udder troubles may be directly traced to bad milking and mere ignorance on the part of the milker than anything else. I have seen milkers who were ignorant enough to wash soiled udders with ice-cold water in the dead of winter and then were surprised when the udders went wrong. The washing of the udder after this fashion frequently causes inflammation and is the origin of no end of grave complications. It is a vile and ruinous practice and I know from experience that it is quite a common thing on many farms.

Inflammation of the udder is also the result of blows, bruises, rough and careless milking. It also arises from colds and infections. The latter is caused by a bacteria which enters the teat canals. Congestion and inflammation of the cellular tissues appear shortly before or directly after calving. It affects the whole udder and abdomen, which becomes swollen and has a reddish color. The patient should be given plenty of rest, cooling and laxative food, epsom salts, frequent cold compresses and the whole udder should be well rubbed in with warm sweet oil. Later on, warm stupes tend to scatter the swelling and inflammation, and the udder should be milked out.

The catarrh of the udder is a catarrh-like disease on the mucous membranes of the lacteal glands and the milk cistern. It is caused by colds, allowing the cow to go unmilked and through infection. The treatment generally pursued is to milk regularly and very gently. Keep the udder warm and rub well into the skin warm sweet oil or a camphor salve.

Garget or caked bag must be treated as infectious, and each case should be treated as infectious unless proved to the contrary. Where there is any doubt, the victim should be separated from the rest of the herd. Some cows escape infection and it appears that others are to a certain degree immune. Garget is a disease which requires the care of a qualified veterinary surgeon and should not be treated by an inexperienced person, however, where a vet is not to be had and even when an accurate diagnosis cannot be ascertained, it is perfectly safe to give a purgative consisting of an ounce of aloes with ginger and salts, and with the milk fever syringe inject half a pint of diluted peroxide of hydrogen to one part in nine of water. The teat should be held a few minutes in order to retain the fluid, otherwise it will be rejected. This treatment has been found to be very effective to disinfect the udder and by a careful massage may be worked into the canals and cavities of the udder.

Garget or caked bag is very painful. The animal has fever and frequently lies down. The walk is broad and strained. Under great pain the milk should be carefully extra-tered by the aid of the milk syphon, an instrument which is well known to all catlemen. This should be thoroughly disinfected before used.

In case of severe pain and swelling, the udder should be placed in a suspensory sling. In concluding these few remarks on the subject of udders, I would like to say that I grew up with a large herd of heavy milking Holstein-Friesian cows and I can never remember a single case of garget occurring in the herd and only one case of inflammation of a very superficial nature.

Tuberculosis.

The dissemination of tuberculosis has always been viewed with alarm by catlemen in all parts of the world, and the recent campaign to effectively eradicate this formidable scourge must attract the attention and interest of the most callous mind. There is probably no greater movement on foot, which is more noble, humane and enterprising than America's combined national effort and determination in rooting out this scourge by removing all such known causes which tend to propagate and prevent the dissemination of bovine tuberculosis. The work to be undertaken is not only colossal in magnitude, but its importance is monumental and deserves the support of every good citizen in the United States. The disease may be traced to no end of causes, the most of which are generally known, but to control such a large field as the United States is a matter which will require many years of hard, persistent and patient work before it will bear the desired fruit.

What standard the Government intends adopting to combat tuberculosis is of great economical importance for our whole agricultural husbandry, because a blunder in this respect could become fatal to the future prosperity and development of cattle breeding.

We are taught that the origin of tuberculosis is caused by the tuberculosis germ, which after having been rejected from the diseased animal's body remains for a length of time in the air and lurks in all kinds of filthy matter. The germ is either taken up through the organs of respiration or through the food into the body. The lungs are mostly attacked; however, no part of the unfortunate animal's body remains spared. The secretions of the animal, namely, the breath, excrement and the milk, infect others and in all probability human beings, especially the young and the weaklings.

The older the cows, so much greater is the danger of tuberculosis. Experience has taught us that young animals are comparatively seldom attacked, but that the largest per cent. is extraordinarily high in old stock has been proved in the most conclusive manner.

In a certain large city of Europe, 14,684 cows over four years old, were sent to the shambles, of which 14,556, i. e., 99 per cent. were found to be tuberculous. These figures alone show how extraordinarily strong is the danger of infection, so that source of infection must exist in almost every stable. Far too many aged cows are used for breeding. If you take a cow well advanced in

(Continued on page nine)

Stock Show and Fair at Nestved, Denmark

(Continued from page one)

country, one for each district. The cattle shows are always in ordinary working condition. No extra credit is attached to expensive grooming and fancy blankets. They are farmers' fairs for farmers. Every farmer seemed to have a personal interest in some cow or bull and many of the entries were from small farmers, who own only a few cows and have a share in a bull.



A Prize Bull

Butter and bacon go together and the Danes have stuck to this combination, even through the difficulties arising out of the war.

At the show everybody crowded around the cows and hogs. The splendid exhibits of carriage and draft horses and farm machinery came in for but a small part of the attention.

It was entertaining to watch the crowds, to see 10,000 Danes together in one group. I was even more interested



Danish Farm Type Horse

to see how serious the country people and the city people as well, farmers, merchants, army officers, men, women and children all took the day. They were off for a holiday, too, and you can trust a Dane—if anybody—to have a good time in life. But on the other hand, they



Prize Winning Danish Reds

seemed never to forget the business in hand or the importance to their own economic well-being and that of their nation as a whole to breed for greater individual production of milk and an ever improving butter fat content, to get animals that, over a long period of years, can turn good records and at the same time do it with regular care and without forcing for phenomenal records.

Any account of the day at the fair would be incomplete without an appreciation of the kindly attention shown the stranger on every hand. Everybody seemed ready to go out of their way to make the time spent worth while. In fact, one of the farmers took the writer 30 miles in his "Ford" to the Government specialists who gave me the information contained in this article.

Delaware Pasteurizing Regulations

We are advised by the Delaware State Board of Health, that the recent resolution of that body, which became effective August 1, 1920, requiring the tuberculin testing of dairy herds, does not apply to herds, either within or without the State, if the milk produced is shipped to a plant at which it is pasteurized before being delivered to Delaware consumers.

All milk that is shipped into Delaware from other States must be from tuberculin tested herds if it is not pasteurized before delivery to the consumer.

In other words, as we understand it, dairymen shipping milk to the Philadelphia market are not affected by these regulations, and continue shipping as heretofore. Those shipping to Delaware dealers are likewise unaffected as the dealer must do the pasteurizing. Small town distributors, in Delaware come under the Delaware State Board of Health regulations and must either pasteurize the milk before selling to consumers or obtain their supply from tuberculin tested herds. Under the regulations no raw milk is to be sold to consumers in Delaware unless from tuberculin tested herds.

Dangerous Cows

Twenty-five dairy cows driven across the Maryland-York county line by cattle dealers in violation of the Interstate cattle law, were quarantined and inspected by agents of the Bureau of Animal Industry, Pennsylvania Department of Agriculture, and nine, or 36 per cent. of the cows were found to be so badly diseased that they were condemned for fertilizer.

The State line is being closely watched by bureau agents, and the State officials in co-operation with the Federal Department of Agriculture, are exerting every effort to break up this illegal traffic in diseased cattle.

Prospective purchasers are warned against buying cattle unless a bona fide health certificate for each animal is furnished.

The diseased cattle in this instance were to have been offered at public sale in a section of Chester county which contains hundreds of good dairies. Had they not been caught and held by State agents they would, undoubtedly, have been bought by unsuspecting farmers placed in their herds, with the result that tuberculosis would have been spread to other cattle, to say nothing of contaminating the milk.

NEW FREIGHT RATES EFFECT ON MILK SHIPPERS

The Interstate Commerce Commission has granted the railroads the right to increase freight rates and passenger fares. In this district the railroads published the new rates making the same effective on August 26. The advance in the rate for milk and cream was fixed at 20 per cent. above the rate heretofore prevailing.

Whatever your previous rate has been

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS



What We Found Out

Health Conditions a Big Factor

The Quaker Oats Co. Gentlemen—I must say to you frankly that in my letter to you concerning feeding of Holstein Friesian Cows on my Arden Farms, I overlooked the most important factor, which I wished to bring out. I do not believe in high protein ration. After the experience I have had, it is my judgment that breeders do not place enough importance upon the maintenance part of the ration of a cow. To secure a maximum yearly production, means that a cow must be kept in good physical condition, nothing must be done to tear down the structure. It is my judgment that too much protein is injurious. There is good chance for argument as to just how much protein a cow should have, but I do not wish to engage in a discussion of the fine points, but I believe that a maximum of protein is better than too much. I expect to have cows go on year after year and maintain their good health and produce their maximum of butter and milk. We mix most of our feed ourselves with the exception of SCHUMACHER FEED and BIG "Q" DAIRY RATION, with which we have been very successful. Yours very sincerely, (Signed) J. M. BACKEY.

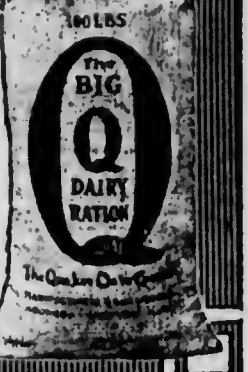
SCHUMACHER FEED AND BIG "Q" DAIRY RATION

Wherever SCHUMACHER FEED and BIG "Q" DAIRY RATION are used you will find a herd that produces to the satisfaction of the owner. Holsteins—Jerseys—Guernseys—cows of every breed alike testify to the value of these result-producing feeds. 36 records with the aid of these feeds.



Fed in combination they make an ideal ration—one which you can readily regulate as to amount of protein and carbohydrate content to suit the needs of each individual cow. Their palatability, high digestibility, variety and bulk, induce cows to eat heartily and produce abundantly. With SCHUMACHER FEED as the maintenance part and BIG "Q" as the protein part, you have a ration that will give you maximum long time milk production and ideal health conditions in your herd. A few weeks trial will convince you. Order from your dealer. If he can't supply you, be sure to write us.

The Quaker Oats Company
Address: Chicago, U. S. A. (116-S)



Place your order with
your dealer for

LEWIS

LINSEED OIL CAKE—in 300 lb. Bags

or
LINSEED CAKE MEAL—in 100 lb. Bags

These foodstuffs are made right in Philadelphia so that your dealer receives his shipments without the transportation delays which occur on shipments from the Middle West.

Ask the farmer whose
cattle eat Lewis Feed

JOHN T. LEWIS & BRO. COMPANY
705 LAFAYETTE BLDG. PHILADELPHIA

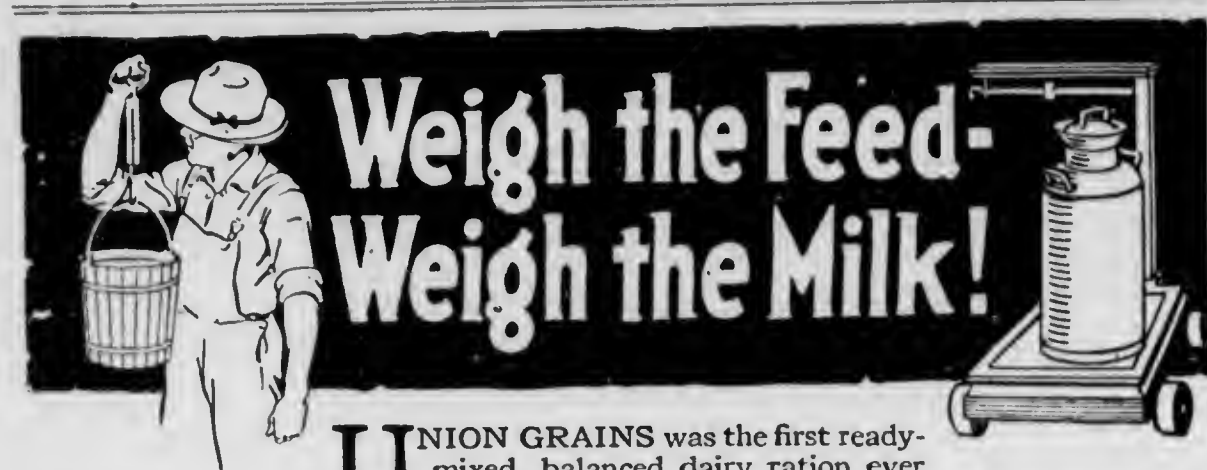
the new rate will be 20 per cent., or one-fifth more than the rate previously paid.

All milk and cream tickets purchased by shippers prior to August 26 were void after that date unless validated by the payment of the difference between the old and the new rate and so marked by the agent at the station where they were purchased.

As all sales of milk are based on the delivered Philadelphia price, the increase in freight will have to be paid by the producer. In cases of direct

shipped milk, the increase will be felt in increased cost of tickets while milk delivered to receiving stations will take an increase in the amount of the freight charge resulting in a lower net receiving station price for milk.

At the 50-mile zone the freight rate has been .296 per 100 pounds, bringing a net price of \$4.07 per hundred for 4 per cent. milk. Under the new freight rate, which would be .356 per hundred, the net price would be \$4.01 per hundred.



Weigh the Feed— Weigh the Milk!

UNION GRAINS was the first ready-mixed, balanced dairy ration ever offered—and it's always been known as the biggest producer that ever came out of a feed bag.

Big Dairies use it. The Hershey Chocolate Company's big herd of 2,000 cows have eaten it for years and the Hershey Company urges all the farmers whose milk it buys to use it. They want more milk. They want it produced as cheaply as possible. So they buy an average of four carloads of Union Grains every month. And they're the kind of people who know whether it pays or not!

Seventeen years of experience in mixing dairy feed goes into every bag. It's a work of real experts. You can't be sure that your own mixtures are the best you can do until you have tried Union Grains.

Write for a Union Grains Cost Sheet and know what dairy feed actually is costing you.

We also make Ubiko Stock Feed, Ubiko Pig Meal, Ubiko Buttermilk Egg Mash, Growing Mash, and Scratch Feed.

THE UBIKO MILLING CO. Dept. I Cincinnati, Ohio



International MOTOR TRUCKS

FOR LOW COST HAULING

Farm Operating Equipment
INTERNATIONAL HARVESTER CO.
OF AMERICA



216-220 N. Twenty Third St.
Philadelphia



NICE

The Name to go by
When You Go to Buy

Paints and Varnishes

Ask your dealer or write us direct. Booklet "Paint Pointers" FREE. Contains valuable information on all paint subjects

EUGENE E. NICE

Philadelphia

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS



GREEN MOUNTAIN SILOS

The Green Mountain silo with the new hip roof does credit to any group of farm buildings, no matter how pretentious. With its nut-brown creosoted staves and bright red cedar shingled roof, it is a beauty.

Just as good as it is good looking, too. Each part that has to stand a strain and in a silo that means almost every part is built extra staunch and heavy.

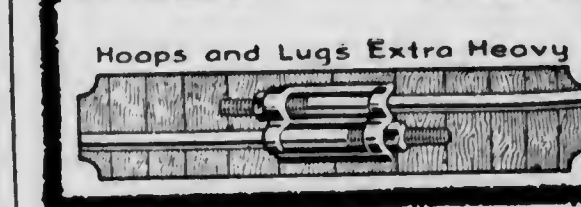
Green Mountain staves are of extra-heavy, clean, well-fitted lumber—creosoted to weather-proof and preserve the wood. The hoops are of extra-heavy steel with easy-fitting, rolled (not cut) threads.

The safe-like Green Mountain door is a patented feature that insures sweet silage.

The Green Mountain anchorage system prevents warping and blowing over and holds rigid against unusual strains.

No iron parts on the Green Mountain ladder to frost your hands or yull off your mittens in winter.

There's a real reason for every Green Mountain feature. Write for free 1920 literature and get the whole story.



More Accredited Herds

Pennsylvania has passed the two hundred mark in tuberculosis free cattle herds and now ranks third in number of accredited herds in the United States.

The work of eradicating tuberculosis under the officially accredited plan by the Bureau of Animal Industry, Pennsylvania Department of Agriculture, has increased beyond all expectations, and the bureau has more than five hundred herds waiting for the initial test.

The accredited herd work has extended into 57 counties of the State and the plan for the control of tuberculosis has been indorsed by most of the breeders of pure bred cattle. Many pure bred cattle associations, as well as bull and calf clubs have been formed, and one of the rules of these organizations is that members must place their herds under the tuberculosis free accredited herd plan. These associations realize that if their members expect to be successful breeders they must maintain healthy herds and that it does not pay to use high priced feed and farm labor on diseased cattle.

The present day successful farmer keeps only the best and healthiest live stock; other kinds do not pay.

The Government was going to give all the soldiers land, but by the time they get it, they will be too old to do any farming, says an exchange.

August Milk Conditions

(Continued from page one)

34 cents was the lowest price for the month. This represents \$2.64 per hundred for 4 per cent. milk at all delivery points or 7 cents per quart f. o. b. Philadelphia. The price for basic milk for August was 10 cents per quart, or \$4.07 per hundred in the 50-mile zone, based on 4 per cent. butter fat content. The same general price for basic milk will be maintained for the month of September, with the exception that some variation at out-of-town points will be necessary in order to adjust the prices involving the increase in freight rates recently announced by the railroads and authorized by the Interstate Commerce Commission.

ADJUSTING THE NEW MILK PRICES

While there was very little difficulty in obtaining the co-operation of the Philadelphia dealers, large and small, in the adjusting of the new price basis covering both the advances to be paid producers as well as the assistance necessary to obtain the readjustment of the retail price, considerable trouble was involved in bringing about the co-operation of some of the dealers in the smaller towns.

Most of the dealers in the nearby towns co-operated willingly, after various conferences between the local producers, dealers, representatives of the Interstate Milk Producers' Association and frequently with representatives of local boards of trade, etc. Adjustments were frequently necessary, involving some changes in the basis owing to local conditions which were arrived at by mutual agreement.

In one city, where co-operation has been lacking for a long while, your organization has been successful in obtaining a satisfactory arrangement, dating from August 1. Under this arrangement full prices will be paid in the future.

At the time we go to press there are still one or two points where co-operation is lacking. Continued efforts to organize these localities are being made and when conditions are favorable some definite action is expected.

POUNDS MILK FOR POUND BUTTER

The question of the amount of milk in pounds required to make a pound of butter has frequently been asked. There has been a wide variance of opinion in this matter based on individual practices. In a recent issue of Hoard's Dairyman this question was taken up and the following quotation very aptly explains this question:

"The number of pounds of milk necessary to contain enough fat to make a pound of butter depends on the fat content of the milk. Milk averages a test of approximately 3.8 per cent. butter fat. Since about eight-tenths of a pound of fat is sufficient to make a pound of butter, it will, therefore, require approximately 21 pounds of 3.8 per cent. milk to supply this fat."

If your percentage of butter fat is above or below 3.8 per cent., divide whatever the percentage of fat may be into eight-tenths pounds of fat necessary for a pound of butter and you will obtain the resultant number of pounds of milk required for a pound of butter.

ARE YOU USING BUTTER SUBSTITUTES?

While it may be true that a man who milks cows and uses oleomargarine on his table cannot look a cow in the face, there are still many men who are guilty of this indictment. Then there are thousands of other people living in the country, not milk producers, who are injuring the business of the dairymen by using butter substitutes. Many country stores sell from five to ten times as much oleo as butter and the dairymen themselves should do something to remedy the situation.

The National Dairy Council, Chicago, has published a very well gotten up poster done in colors 20x30 inches in size, intended to stimulate increased consumption of all dairy products. This poster, if placed in country grocery stores and other public places together with a little missionary work on the part of every milk producer should soon remedy the present conditions in the country districts.

The New Jersey Department of Agriculture, Trenton, has secured a number of these posters which will be sent to members of the Interstate Milk Producers' Association in New Jersey, for the asking, to be placed in public places where they will do some good. State the number of posters you can use.

THE UDDER AND MILKING

(Continued from page six)

years and expect to produce robust and healthy offspring you must be prepared for disappointment and at the same time put yourself down on the list as a propagator of bovine tuberculosis. I have seen it over and over again with old cows and mares, and in the majority of cases the offspring is puny and absolutely worthless. There are exceptions to the rule, but they are, indeed, very rare. So long as we persist in working contrary to the iron laws of our nature in our system of breeding, so long can we expect to produce animals with weak constitutions, thereby enhancing the susceptibility and propagation of tuberculosis in our herds.

The question of tuberculosis is, in my opinion, not only a matter of care, cleanliness, sunlight and a thousand other important essentials, but above all things a thorough knowledge of breeding. In the past far too little attention was given to this all-important factor, for we have instances at home and abroad where by a long practice and careful system of pairing and selection of healthy animals, and by a persistent weeding out of all weak stock, tuberculosis has been reduced to a minimum and in some cases entirely eradicated. Such districts actually exist in some parts of Europe and their success is chiefly attributable to their thorough care in the selection of their breeding stock. Only by conforming to the iron laws laid down by nature combined with careful selection of our breeding animals, can we ever expect to become masters of this formidable scourge.

By a universal introduction of the tuberculin test and by destroying and allowing a compensation for all condemned and suspicious animals, of course, the American stock of cattle could be temporarily made free, yet the cost would be extraordinarily high, besides it would require an additional large working sum to compensate, and

You Can't Compete With Machinery

Mixing feed on the farm is old fashioned, like threshing with a flail.

The modern time and money saving way is to have it done by machinery on a large scale.

In our mills we mix a ton of Unicorn Dairy Ration in one minute at a power cost of a few cents.

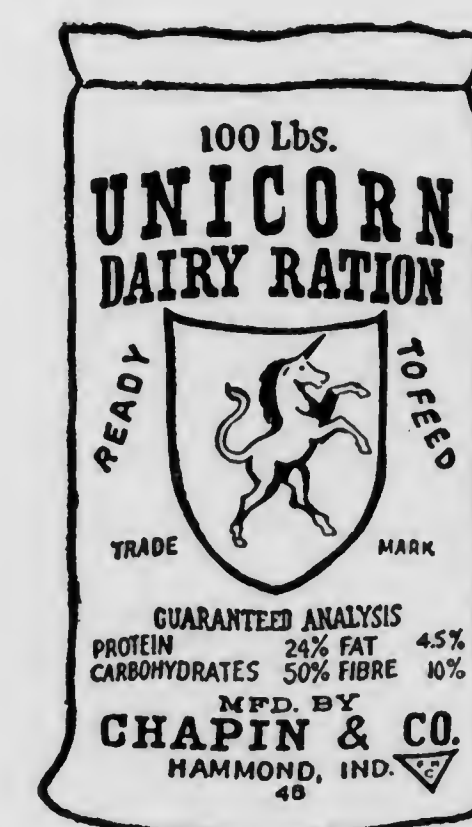
Labor is scarce and high priced. You can use yours more profitably on other work.

Unicorn requires no labor. Ready to feed, you get it as you need it. No worry or work of keeping on hand a supply of many different kinds of feed.

Made of the best feeds. Put together in the right way by men who have learned by experience.

Be wise. You can't compete with machinery. Lower your milk production cost by feeding Unicorn.

CHAPIN & COMPANY, Chicago



"Better Sires—Better Stock"

We will award a money prize of \$1,000 to the county that first eliminates its inferior sires.

This prize will be awarded under rules provided by the Bureau of Animal Industry, United States Department of Agriculture.

Detailed information on request.

Reading Bone Fertilizer

Quality Service Satisfaction
Feeding the World: The American farmer's job. To do your utmost the land should be fed too. Stick to the old dependable when it comes to feeding the land—Reading Bone Fertilizer.

(This trade mark means quality)
Reading Bone Fertilizer Co., Reading, Pa.

Ask your dealer for Reading Bone Fertilizer.



Write for booklet and further information.

FOOD SAVING

"Well Ezri, how'd yer make out with yer summer boarders this year?"

"Fine. Best season I ever had. There was seven, all told—three couples in love an' a dyspeptic."—LIFE.

When young drink milk to keep vigorous.

PHILADELPHIA SILOS

The Silo with the BEVELED DOORS
Strong Hoops
Selected Material
Opening Roofs

Ensilage Cutters
Wood Tanks
Steel Towers
Ensilage Trucks

Write for prices and Catalogue

E. F. Schlichter Co.
10 S. 18th St.
NORRISTOWN, PA. PHILADELPHIA, PA.

Breeds of live stock cannot be improved without the constant use of good sires. A good sire so impresses his characteristics upon his offspring that they are more like him than like the common herd.—Missouri State Board of Agriculture.

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS



James Cups Make More Milk

Increase milk yields an average of 2½ lbs. per cow per day, save work, and do away with bothersome tank heaters. 336-page book on barn building and barn equipment—carriers, stalls, ventilators, pens, etc., sent on request.

The James way
Labor Saving Equipment for the Dairy Barn

Prest-O-Lite STORAGE BATTERY SERVICE

Prest-O-Lite Service Prevents Costly Repair Bills
YOUR storage battery should be tested regularly. Perhaps it needs repairing—who can tell? There's one sure way to find out.

Call and let us test your battery today. Should a test indicate the necessity for repairs, we have a service battery for you to use while the work is being done. You have the continuous use of your car. When your battery is ready we will notify you promptly. You will be agreeable surprised at the moderation of our charges in these days of high prices.

Pusey-Young Storage Battery Station
117 W. MARKET ST. WEST CHESTER, PA.

COSTERVILLE, PA. FELLOWS GARAGE, BERWYN, PA.

THE DAIRY LABORATORIES
5 North 20th Street, Philadelphia, Pa.
Consulting and Analytical Chemists
Complete Chemical and Bacteriological Analysis of Milk, Dairy Products, Foods and Waters

FLY SPRAY TO KEEP FLIES OFF DAIRY CATTLE

Chlorine Solution to Sterilize Milk Utensils Write for information
Dr. Lee H. P. Maynard, Milk Expert
Dr. H. S. Johnson, Bacteriologist
Branches: Washington, D.C. Pittsburgh, Pa. Baltimore, M.D. St. Louis, Mo.

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS

GOVERNMENT RECIPES FOR OUTDOOR WHITEWASH

We have frequently been asked for the formulae adopted for outdoor whitewash by the United States Government:

The following directions given by the United States Department of Agriculture for the preparation of a whitewash for outdoor work, has proved to be very satisfactory: Slack one-half bushel of lime in boiling water, covering to keep in the steam. Strain the liquid and add a peck of salt previously dissolved in warm water, three pounds ground rice boiled to a thick paste and stirred in while hot, one-half pound of Spanish whiting and one pound of glue dissolved by soaking in cold water and then hung over a slow fire over a glue pot. To this mixture add five gallons of hot water. Stir well and let stand for several days, covered from dust. It is best applied hot.

BLAIR COUNTY, PA., FARMERS PICNIC

The Blair county farmers held their annual picnic at Lakemont Park, between Altoona and Holidaysburg, Pa., on Thursday, August 26th. Usual picnic entertainments were the order of the day. Morning and afternoon sessions were held at which addresses were made by various speakers.

At the morning session, R. W. Balderston, secretary of the Inter-State Milk Producers Association, spoke on co-operative dairying and breeding, referring particularly to the successful efforts along those lines in Denmark, which country he had recently visited. Mr. Morgan Barnes also made an interesting address in the development of dairying in Mercer county.

"Co-operation," was the principal topic of the afternoon session. H. F. Cox spoke from the farmer's standpoint. An address from F. W. Beckman, president of the Chamber of Commerce of Altoona, Pa., treating the subject from a business man's standpoint was read by Bruce Dunlap, county agent. C. A. Les Kutz spoke on the subject of co-operation from the workingman's standpoint. He urged a greater co-operation of all classes of society.

HUNTINGDON COUNTY PICNIC

It was estimated that 1150 automobiles were parked in the neighboring field when the "Inter-State" locals of Huntingdon county held their first annual picnic at Alexandria Park, Huntingdon, Pa., on August 25th. At least 5,000 people were in attendance. Business places in town suspended operation for the day and the townspeople were largely represented at the meeting.

Farmers from all over the county as well as from neighboring counties attended. A particularly significant get-together-spirit was evident throughout the day, indicating a better and fuller understanding for the future.

Baseball and other games entertained many. The Ladies Band from Beaver Springs played in the morning and afternoon.

At the morning session, Secretary R. W. Balderston, of the Inter-State Milk Producers Association, spoke on

"Co-operation," referring in part to his recent experiences in Denmark.

At the afternoon session, Morgan Barnes, of the Grove City National Bank, explained the methods used to place Mercer county, Pa., in the first rank of co-operative dairy communities in the United States and told graphically of the results accomplished.

Dr. Clyde L. King, Milk Arbitrator for the State of Pennsylvania, in an interesting address, explained the factors which entered into the determination of the farmers prices for milk. He referred to the Philadelphia situation as being in a particularly healthy condition.

TALBOT COUNTY MILK WEEK

Talbot county, Maryland, has been having a week's drive, advertising the value of milk as a food and campaigning for an increased home consumption of milk and milk products.

Meetings were held at various points in the county. On Saturday, August 7 afternoon and evening meetings were held at Easton, Md.

Dr. A. F. Woods, president of the University of Maryland, spoke at the afternoon session on the food value of milk, showing its economic value in the



Watching the Milk Fairies Play

diet. R. W. Balderston, secretary of the Interstate Milk Producers' Association, who has just returned from eight months' service in Europe, feeding children under the American Friends' Service Commission, spoke on co-operative efforts of dairy farmers. Mr. Balderston also referred to the dairying interests in Denmark, which received a good share of his attention while abroad.

One of the interesting features of the meeting was a "Milk Fairy Play," staged by the children of the vicinity.

The evening session comprised musical entertainment together with the showing of motion pictures of milk films.

EASTERN GUERNSEY BREEDERS' MEETING

The Eastern Guernsey Breeders' Association held its usual summer meeting at the home of M. T. Phillips, Pomeroy, Pa., on Saturday, August 21. In addition to the transaction of general business, addresses were made by Robert Schoville, president, American Guernsey Cattle Club and William H. Caldwell, secretary-treasurer of the same organization. Harry Heyward, formerly dean of the Delaware State Agricultural College, also spoke on the value of advertising dairy cattle and dairy products. R. W. Balderston, secretary, Interstate Milk Producers' Association, made an interesting address on co-operative work and also spoke of the co-operative dairying methods in Denmark.

Read the advertisements—keep posted on money saving propositions.

TRENTON FAIR

One of the promising features of the coming Trenton Fair, which will be held at Trenton, N. J., from September 27 to October 1, inclusive, is the dairy and cattle exhibition. This department of the big exposition never fails to attract widespread attention and with this year's exhibit greatly enlarged and developed and the premium scheduled advanced to carry appeal to all exhibitors, the interest attending it is expected to reach wider proportion than ever.

Many of the best breeds and prize herds will be shown in the cattle department.

The various displays introducing prize exhibits in agricultural and horticultural products, farming implements, home and dairy products, art and fancy work, cattle, sheep and swine, poultry and dogs, fruits and paintings, automobiles and motor trucks, are promised as nothing short of a revelation. Permanent buildings have been established to take care of special exhibits, along with the usual exhibition structures which may be found in all parts of the big grounds.

Trotting, pacing and running horse races will be an added attraction daily. Special dog, poultry, pigeon and pet shows have been arranged, and the premium list has been increased in all departments to offer better inducements to exhibitors.

There will be daily aeroplane flights. Auto polo will be played on the race track. A motor classic will be run on October first.

THE CIDER SITUATION

The Federal authorities have ruled that cider may not be sold unless it contains less than the amount of alcohol fixed by the Volstead act. The average farmer has no means at his disposal of telling what the alcoholic content of his cider may be. His safest course therefore, is not to offer his cider for sale, but rather to make it into vinegar. A ready sale for vinegar may be found and any danger of conflicting with the prohibition laws removed.

Director Foust, of the Bureau of Foods, Pennsylvania Department of Agriculture, has warned the farmers of the danger involved in selling cider. While it is legal to sell sweet cider, containing less than one-half of 1 per cent. of alcohol, it takes but very little fermentation to increase the alcohol content of cider above the maximum fixed by law and in selling such cider the farmer as well as his customers, would then be liable to prosecution. By making your cider into vinegar the farmer not only avoids the danger of innocently violating the Volstead act, but he also brings for himself an excellent return for his apple crop.

(Continued from page three)

yearly test. She has a seven day record of 24.25 pounds of butter as a 3-year-old. No. 5, unnamed, sired by Pride Homestead Button; dam, Meadow Holme Bromide Ormsby, who sold as a heifer at the St. Paul National sale for \$1500, and is now on yearly test. Her dam produced 14.50 lbs butter as a two-year-old. No. 6, unnamed, sired by Model Segis Butter Boy; dam, Aggie Belle of Sunnyside, who as a 2 1-2-year-old made a seven day record of 20.87 pounds of butter.

Best Sale IN CHESTER COUNTY

60 Head Pure Bred Holsteins

Best Bred
High Producers
High Testers
Sold On 60-Day Retest

Prize Winners

State and County Fairs
Now is the Time to Buy
Better Your Herd
Increase Your Production
Catalog Giving Pedigrees on Application
Send for it

Don't Miss This Sale

**SEPTEMBER
24th**

**West Chester Fair
Grounds**

WEST CHESTER, PA.

PHILIP S. KELLY

West Chester, Pa.

When Cows Freshen

They may ABORT; may RETAIN the AFTERBIRTH; may FAIL TO BREED

Hood Farm Antiseptic Breeding Powder is the best remedy for these troubles.

The best cows frequently have Milk Fever. Hood Farm Milk Fever Outfit never fails to cure milk fever.

All cows are subject to Garget. Hood Farm Garget Remedy will save the udder and the cow.

Cows may have Infectious Diarrhea or White Scours soon after birth. Jermkil kills the germ before the germ kills the calf.

Cows often have Scours caused by indigestion. Hood Farm Calf Scour Remedy and Digestive Powder will save the calves.

It is Safe and Wise
To have the above named Remedies on hand. Order today before your cows begin to freshen.

C. I. HOOD CO., Lowell, Mass.

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS

CONSIGNMENT SALE

of Registered and A. R. O. Holstein Friesian Cattle, at the
HORNLESS HOLSTEIN FARMS, CLARKS SUMMIT, PENNA.
10 miles north of SCRANTON, PENNA., on the D. L. & W. Railroad
and the Northern Electric Railway

ABOUT 100 HEAD

MANY of them are sired by the BEST DAMMED BULL of the breed, a son of the WORLD'S RECORD SENIOR 4 YEAR OLD, KEYSTONE BEAUTY PLUM JOHANNA, with 25,787.5 lbs. of milk, 1294.7 lbs. butter, strictly official in a year, 4½ IN LONG TIME TEST. Daughters of cows with semi-official records from 600 lbs of fat and up; sons of 30 lb. cows; son of a cow with 1050 lbs. in semi-official test. 25 animals from a herd under Federal Supervision. Many of the animals sold on a 60 day retest.

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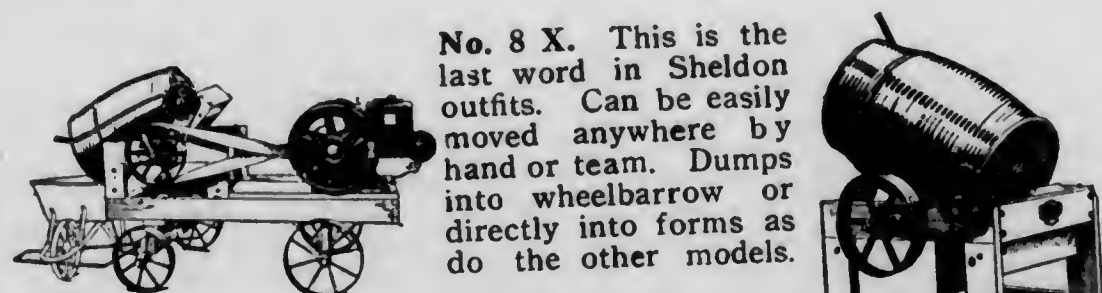
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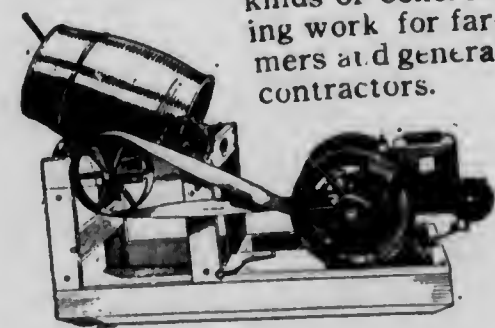
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BY HARRY E. CANN

Formerly with the STANDARD SUPPLY COMPANY

"The Price of Milk"
By Clyde L. King
Ready Early In September

Comprehensive Treatment of the Milk Industry in All Its Phases—Fully Illustrated, Authoritative and Instructive
Everyone interested in the Milk situation should have a copy of this book

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INTER-STATE

Milk Producers Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE INTER-STATE MILK PRODUCERS ASSOCIATION, Inc.

VOLUME I

WEST CHESTER, PA., AND PHILADELPHIA, PA., OCTOBER, 1920

NUMBER 6

SEPTEMBER MILK CONDITIONS

Heavy Supply Continues—Condensaries Weak Link in Situation

There was an almost unprecedented supply of milk during September. Usually there is a moderate decline in the milk flow, becoming sharp after a few sharp frosts. Weather conditions, however, have been so favorable for milk production, during almost the entire month, that the peak of the supply carried almost through the month. The whole milk dealers, however, have, with the exception of smaller concerns, been taking all the milk shipped.

A most complicated condition of affairs has been in the course of development throughout the month, due to the attitude of condensed milk manufacturers. Condensaries have been confronted with an almost entire lack of demand. Foreign business has been at a standstill for several months, owing largely to the unfavorable rates of foreign exchange, as well as the generally unsettled financial situation in foreign countries. In the home markets, it is claimed, it is impossible to move any quantity business, even at price concessions. Large stocks, it is claimed by condensaries, are being carried and condensed sweetened goods, largely manufactured at the high price level of sugar, can not find a market with sugar steadily declining.

All in all, the situation from the condensaries point of view is critical. In some territories they have refused to buy any whole milk after October first. They will, however, receive milk and manufacture same into butter or cheese for the farmer's account. In some sections condensaries are reported to have closed their plants.

In this district several manufacturers have made arrangements with their farmers to take milk at some of their stations during the month of September on a butter fat basis, paying from 70 to 75 cents for butter fat and returning the skim milk to the farmers. What attitude these manufacturers will take after October first is problematical at this writing. As an organization we have stood firmly that present prices should be maintained, unless, of course, the market in the surrounding primary milk markets should break, under which cir-

cumstance we should have no alternative but to meet those prices.

The condition in which the condensed milk manufacturers find themselves is believed to be a temporary one—much, however, depends on the milk flow. We cannot force weather conditions and much depends on this. If we have early frosts the supply of milk will naturally fall off—if not a continued good flow of milk can be looked for.

In our position we can only await de-

THE FAIR PRICE OF MILK*

By Dr. Clyde L. King
University of Pennsylvania

Last September you asked me to act as your representative as milk price arbitrator as to price of milk to the producer in Baltimore territory and to the consumer in the city of Baltimore. This period has expired, and I wish to hand you herewith a report covering briefly the facts. I have made this report brief and have put most of the facts in chart form.

The relative prices received by producers for milk and the relative prices paid by producers for feed in the Baltimore territory, 1913-1920:

The producer may feel with more reason that he has not had as high a price as he should have had.

Milk flows readily from one market to another. Baltimore territory does not produce enough milk to satisfy the needs of Baltimore consumers the year round. Milk has been, as heretofore, brought in from Philadelphia and New York territories. The price of milk to the producer in the Baltimore territory cannot remain above the price in these territories plus freight to Baltimore for any substantial period without attracting enough milk from these territories into Baltimore to break the Baltimore market. Even if a wall were built around the Baltimore milk producing territory so that no whole milk could come into Baltimore save that from what is regarded as the Baltimore territory milk could still come in as butter or cheese or condensed milk or as ice cream in sufficient quantities to affect the Baltimore price on whole milk. This is the outstanding market fact that will "protect" the consumer as some consumers will see and that will prevent a price to the producer that will reflect costs in the Baltimore territory as the producers see it.

The price to the Baltimore milk producer averaged 39 cents per gallon from September 1st, 1919, to September 1st, 1920, as compared with 35 cents per gallon in the previous. The price to the producer for the first

I have brought out a comparison of the price received for 4% milk f. o. b. Baltimore, with the price paid for feeds, from January 1, 1913, to August 1, 1920, in the chart herewith. This chart strikingly reveals that the price of milk to the farmer has simply kept pace with the increase in the price of feeds. The increase in wages has been more than proportionate to the increase in feed prices for two reasons: Baltimore farmers had to increase wages to keep higher city wages from draining the farms of labor; the labor secured has not been as competent as in previous years.

In the light of these facts no one can reasonably hold that the price to the farmer in the past year has been above that to which he has been justly entitled.

eight months of this year averaged 9.7 cents per quart as compared with 8.3 cents in 1918, 9.4 cents in 1919, and 6 cents in 1917. I have used in this comparison the stated price for 4% milk. The price for the past year has been a little more in comparison because milk has been purchased on a butter fat basis.

The price to the farmers has been in line with prices in the primary markets to the north. From September 1st of last year to September 1st of this, the price of 4% milk f. o. b. Baltimore has averaged 9.7 cents per quart as compared with 9.1 cents per quart in the Philadelphia district. This is much higher than in previous years. But it is not more than producing costs in the Baltimore district have warranted.

(Continued on page eight)

*A report to Dr. William H. Killian, Fair Price Commissioner for Maryland on the Milk Price Situation in Baltimore.



Milk platform, Pennsylvania Railroad, 31st and Chestnut streets. Large quantities are received at this station daily

velopments and, in the meantime, prices for fluid milk will be maintained at the present milk price level, 10 cents per quart, f. o. b. Philadelphia, or \$4.01 for 4 per cent. milk at receiving stations in the 50 mile zone.

Under the present plans October, November and December milk is all to be paid for on the basic quantity basis. September milk was on the straight basic and surplus basis the same as applied before the summer premium became effective in May.

Producers should keep in the closest possible touch with the situation at this time. Make plans for the future cautiously, as it is difficult to gauge conditions. Conservative policies should be followed until the situation clears. Clean out your boarder cows.

(Continued on page ten)

CO-OPERATIVE CREAMERIES IN DENMARK

By Robt. W. Balderston

Many methods have been adopted by milk producers in the United States in their endeavor to attain economic equality. Some groups have done this with pure "co-operative" associations, which own and operate manufacturing plants and sell their product, usually butter and cheese, on the open markets.

Some groups, notably the Twin City Milk Producers Association, have applied it to the fluid milk industry. In some places this scheme has been applied to a whole district, including all the manufacturing interests, as well as those districts supplying fluid milk to great cities. Probably the Associated Dairy-men's Association of California have been working successfully along this line for the longest time.

Most of our larger associations and leagues, however, have been organizations purely for collective bargaining.

Experience has taught us that the success of any group will depend largely upon which form of organization is adaptable to the situation. We hear constant references to the Danish co-operatives. I made it a point to learn about them while in Denmark recently.

In that country the first co-operative creamery was started with a view of improving the quality of the farmer's butter, which was being made in small lots on various farms and therefore lacked uniformity, under which circumstances it did not bring satisfactory prices.

The movement grew rapidly. Now some 90 per cent. of the Danish butter is made in these co-operative factories. Next, the exporters (England has been the chief market) were found to be taking too large a share of the ultimate price of this butter, so the creameries combined to form a collective sales organization.

This organization established grading and shipping warehouses at convenient points and selling agencies in London. Through these arrangements the farmers obtain the ultimate value of their product, less actual marketing costs.

The next step naturally followed. A standard grade for all export butter was established and none other but this grade was exported. This butter, known as the "Lur" Brand, soon became popular with the English consumer. It was constantly uniform in quality and character, and soon commanded the highest price in the market.

The skimmed milk from the co-operative factories is returned to the farmers. It was largely fed to pigs.

The market for Danish pork was in England. The packers kept the larger share of the consumer's dollar (sounds natural, doesn't it?) The co-operative creameries were successful—why not co-operative slaughter houses? Money was subscribed and they grew up alongside the creameries. Then like the creameries they were combined and co-operative selling agencies were established.

By this time the farmers were learning to have confidence in their co-operative enterprises and turned their attention to other fields. Eggs had been collected by travelling hucksters, who in turn, sold to the dealers who sold to the exporters. The result was a co-operative egg exporting association. Now the Britisher can have, for breakfast, Dan-

ish guaranteed eggs, bearing the date when gathered and the number of the owner of the hen, with "Lur" Brand bacon at the side and with his coffee, have toast spread with "Lur" Brand butter.

It was but natural, in a country trained to think so fully in terms of co-operative marketing, that many other such enterprises should develop. The cow testing associations, breeding associations, feed buying associations and co-operative loan associations, all came along in time.



Co-operative Creamery on the Island of Fyen, near Odeuse, Denmark

The pure co-operative enterprises of the Danish milk producers have succeeded. The development was economic. First the local group organizing for a specific purpose, along lines of service to its members, not for profit to its stockholders. Second: The selling associations of these co-operative factories, were formed, to dispose of their product collectively and without profit, to reduce the steps between the producer and consumer.

There are some features of the co-operative movement in Denmark that stand out especially strong. The members of a co-operative butter factory or slaughter house bind themselves under heavy forfeit, to bring the product of so many cows or so many hogs to the factory, regardless of how much an independent buyer may offer temporarily to tempt them away from their own enter-



Receiving Room—Showing Weigh Scales at Above Creamery

prise, so as to embarrass and finally ruin its business, and they stick.

The profits are always divided on a basis of the amount of product handled by each co-operator. The stockholders simply get interest on their invested funds. The organizations can therefore be said to be "pure co-operatives." The organizations are built from the ground up—each local has control over local matters with the selling centralized.

Progress in the co-operative movement in Denmark has come through the efforts of the farmers themselves. A farmer had the vision and the courage to start the movement. The idea was preached from neighborhood to neighborhood until it had covered the entire country.

CONDENSED & EVAPORATED MILK REPORT

Bureau of Markets, Washington, D. C.

Issued September 30, 1920

Condensed Milk Manufacturers Close Factories

During the past two months the condensed and evaporated milk market has steadily been getting into worse shape, and now has reached a critical stage with many manufacturers.

Export business which stimulated increased production during the war and the building of many new factories is now at a standstill. Companies which have been exporting have put their stocks on the domestic market, flooding it with goods which are offered at cut-rate prices in order to get their money out of it. Among the factors contributing to a decreased foreign demand is the increased production of foreign countries, which is being offered by Holland, Norway and Denmark in this and other countries at prices below our own.

It is reported that jobbers and wholesale grocers, in expectation of still lower prices, are not taking on any large stocks and are buying mostly for immediate sale or to retail trade. The "tight money" condition is said to be a factor with manufacturers and jobbers, causing them to unload at least a portion of their stocks previously made of high priced sugar at prices below actual cost.

Report of the stocks in hands of manufacturers on September 1, shows that the load carried had increased, while unfilled orders had become practically "nil" on bulk goods and on case goods they were below those of August 1. Some firms reported their stocks were larger than ever in their history and the bottom had practically dropped out of the market. During September, it has been a serious question in the minds of many manufacturers as to what to do on October 1, with producers in most sections contending for higher prices for milk. Some few manufacturers have offered to co-operate with producers in further manufacturing and holding of stocks until sold, before determining prices to be paid the milk producers. Others announce they will close their factories until the present situation improves. Such action will result in curtailed supply, permitting present stocks to be worked off at prices more satisfactory to holders.

Of the twenty and a half million pounds of condensed exported in August, over ten million went to the United Kingdom, nearly three million to Cuba, and nearly 1½ million to the Straight Settlements. Of the five million pounds of evaporated, France took nearly two million, the United Kingdom 1,220,000 and Cuba nearly 375,000 and other countries less than 200,000 pounds each.

Current prices on evaporated case goods range from \$5.00 to \$7.00 per case, and on condensed, from \$8.00 to \$10.50, with advertised brands bringing the higher prices.

Skin condensed bulk is quoted at \$8.75 to \$9.50 per cwt., and condensed whole milk in bulk at \$15 to \$16 per cwt.

FARM BUREAU DISCUSSES MEMBERSHIP

The September meeting of the Chester County Farm Bureau was held in the office of the Bureau, West Chester, on Tuesday evening, September 7th, at 8 o'clock. President J. H. Halderman, Pottstown, was in the chair. Others present included vice president, Charles Garrett; secretary, Philip Price; treasurer, Isaac Passmore; Roland Smedley, Supt. Thomas A. Bock, all West Chester; W. F. Evans, Malvern, and a visitor, J. A. Barrow, Landenberg.

In addition to the regular routine business, considerable time and discussion were devoted to the matter of organization of farm bureau upon paid membership basis similar to that recently put into effect by the Lancaster County Farm Bureau. A committee appointed several months ago to take this matter under advisement was directed to continue its duties and to outline a proposed plan, probably to be presented at the annual meeting of the farm bureau to be held the second Saturday in January, 1921.

The matter which aroused greatest surprise was the presentation of the resignation of the present County Agent, D. S. Adams. Treasurer, Isaac Passmore, stated that after deliberate consideration Mr. Adams felt that an opportunity had opened up to him which offered such substantial inducements as a life calling in a private business field, that he could not feel justified to allow it to pass by, and that regret it as they might, the committee ought to release him at the time he should like to go, no later than December 1st. Upon such formal motion by Prof. Bock, this action was taken.

President Halderman and Mr. Passmore then recommended Mr. William Vandergrift from Tioga county, Pa., now working as Associate County Agent from the Extension Department of the Pennsylvania State College, who had been highly recommended by Director of Agricultural Extension, Prof. M. S. McDowell. After due deliberation and careful discussion, Prof. Bock moved, seconded by Mr. Passmore, that Mr. Vandergrift be engaged as County Agent for Chester county to assume official charge of the Farm Bureau and its activities, December 1st, coming.

The farmers of a community should be interested in a co-operative organization before its formation is undertaken. Interest can be aroused by holding meetings, circulating printed information, and selecting a committee to canvas the community. Discuss the proposed organization thoroughly. Do not claim impossible results for the venture. Emphasize the need for an effective organization and the importance of united support.

MILK SITUATION SERIOUS

Producers Confronted by Difficult Situation

Throughout September there was an undercurrent of uncertainty in the milk market. This was not only local in character but appeared in a wave from west to east. The disturbing element was the unfavorable situation in which manufacturers of condensed milk products found themselves by their inability to market their products.

In some of the districts where the manufacture of milk products is large the situation is very serious. In this district, where the manufacture of condensed products is not large, the effect of the situation in the other markets, is duly reflected.

Early in September, some of the manufacturers in this district declared flatly, that they were going to reduce the price paid to a flat \$3.00 per hundred basis, equivalent to a reduction of \$1.01 per hundred, and that price was to apply from September first.

It was pointed out by the officers of the Inter-State Milk Producers Association that such an ultimatum would not be permitted, but that a conference of all parties interested should be held. It was then decided that a conference be held on September 6th, when the manufacturers, dealers and the executive committee and officers of the association met, but reached no understanding.

It was learned at this time that the manufacturers in New York territory had issued their ultimatum that after October first they would buy no milk until the situation cleared, the time necessary being variously estimated as three to six months. They would, however, take in milk and manufacture into butter or cheese, as trustees, for the farmers account.

A move along the same general line was reported from western manufacturers. In some sections of the western territory prices ranged from \$2.60 to \$3.40 per hundred in September.

These almost concerted actions on the part of manufacturers have given rise to the thought that there was some concerted action being taken by the condensaries to force down the price of milk to the farmer in order to save themselves from losses due to the manufacture of condensed products at high costs, particularly sweetened milk when sugar prices were high.

A subsequent conference of the directors, officers and executive committee of the Inter-State Milk Producers Assn., the milk dealers and the manufacturers was held on September 16th when your officers announced their determination to stand pat at present prices, which at the present high prices of feed, did not show the producer a reasonable profit.

After practically an all day session it was decided that the present price basis for fluid milk, 10 cents f. o. b. Philadelphia, or \$4.01 per hundred, for four per cent. milk, at receiving stations in the 50 mile zone, should be continued indefinitely, in other words, until conditions became such that in view of price conditions in other districts or the world's market, a further conference would be necessary.

This settlement was agreed to by the representatives of the dealers and some of the manufacturers. Other manufacturers announced their determination to go on a butter basis at some receiving

stations at once—in instances dating from September first. Practically all of the condensaries withheld their plans for operation after October first. In this district they will probably be guided by the action taken by manufacturers in other territories.

The various manufacturing plants in this territory which operated during September on a readjusted price basis, have done so without sanction of your officers. Agreements made with farmers in the localities affected, were simply in view of giving some temporary relief in the situation.

Just what these condensaries will do in October is problematical. No conference has been called at this writing. We infer that some plants hope to carry out the same arrangement with their farmers during October that was in effect in September.

NEWS OF THE LOCALS

We are anxious to print the news of our locals. If every secretary would send the editor a letter telling of your meetings, what you had done and what you are planning to do, we would be pleased to mention it.

It would be of great advantage to every local to learn of the activities of the different locals. Let your light shine—send the news to the editor.

NEW YORK SITUATION

The situation in New York territory is somewhat complex. The Dairy-men's League has sold October milk to the dealers at the same price that prevailed for September, \$4.05 per hundred for 4 per cent. butter fat milk in the 200 mile zone.

The condensed and powdered milk makers maintain their stand not to purchase any milk after October first. We are not advised at the time what effect this has had on the general situation, nor do we know how largely the farmers have availed themselves of the offers on the part of manufacturers to make butter or cheese for the farmers account.

The Dairy-men's League is now actively engaged in a campaign to have all their members pool all proceeds of all of their milk and milk products, by which all the milk of the members of the Dairy-men's League will be controlled, handled and sold through its organization and all of the proceeds of all the milk whether fluid or manufactured blended in one general fund and after the deduction of the necessary expense of handling and selling the milk and its products, the net returns from all of the milk will be distributed back to the producers on an equitable basis.

MILK SITUATION SERIOUS

Are you keeping yourself posted on the milk situation?

Condensaries are endeavoring to beat down prices paid producers. This appears to be national and also effects us locally.

Dairying must be conducted on a business basis.

Do not produce for production sake alone. Dairymen are entitled to a living wage and reasonable profit.

Cooperation is absolutely necessary.

Above all, keep yourself posted.

York Valley (Penna.) Cow Testing Association

PAUL C. BOYD, Tester

Following is a list of the ten highest producers for the month:			
	Milk	% Fat	lbs. Fat
Norman E. Rishel—Grade Holstein.....	1293	3.6	69.4
Norman E. Rishel—Grade Holstein.....	1367	3.9	53.3
Norman E. Rishel—Grade Holstein.....	1776	3.0	53.3
C. Allen May—Grade Guernsey.....	1147	5.4	61.9
M. J. Pentz—Grade Holstein.....	1240	3.4	42.2
J. A. Poorbaugh—Grade Holstein.....	1193	3.7	44.1
Jno. L. Reisinger—Registered Holstein.....	1352	4.1	55.4
Jno. L. Reisinger—Registered Holstein.....	1333	3.3	44.0
Jno. Reisinger—Registered Holstein.....	1897	2.9	55.
Isaac J. Rishel—Registered Holstein.....	1482	3.0	44.5

Southern York Co. (Penna.) Cow Testing Ass'n

J. WILSON BROWN, Tester

This association completed its sixth months work September 18th, with 260 cows on test.

The following is a list of the ten highest producers for the month:			
	Milk	% Fat	lbs. Fat
Pugh & Wayne—Grade Holstein.....	1356	4.2	57.0
J. E. Snyder & Son—Registered Holstein.....	1854	2.8	51.9
E. M. Brown—Grade Holstein.....	1227	3.9	47.9
Pugh & Wayne—Grade Jersey.....	1104	4.3	47.7
Pugh & Wayne—Grade Holstein.....	1071	4.0	42.8
Davis Bros.—Registered Holstein.....	1233	3.6	44.4
T. Ross Wiley—Grade Jersey.....	834	5.0	41.7
W. S. Grimm—Registered Holstein.....	1177	3.5	41.2
D. M. Krout—Grade Guernsey.....	843	4.8	40.5
H. G. Hall—Grade Guernsey.....	1011	4.0	40.4

G. G. WEBER, County Agent.

"THE PRICE OF MILK"

The Price of Milk, by Dr. Clyde L. King, Ph.D., University of Pennsylvania, Philadelphia, Pa., published by the John C. Winston Co., Philadelphia, Pa., is ready for distribution.

In this volume, Dr. King, who has been in very close touch with the milk situation, first as chairman of the Governor's Tri-State Milk Commission, (Pennsylvania, Maryland and Delaware) later as Federal Milk Commissioner for the eastern states and as milk price arbitrator for the State of Pennsylvania, has treated this complicated subject in a concise, easily readable manner.

By the use of tables and charts, every point is carefully and clearly brought out so that the reader, without technical knowledge, can obtain a complete understanding of the subjects.

In part one, the price of milk to the producer is treated at length, together with manufactured milk products and their relation to price. The forces that fix the price of milk and the interdependence of local, primary and international markets. In this section the comparative methods of marketing milk under the New York, Philadelphia and other plans are treated under the heading "Policies of Dairy-men's Organizations and their relation to price," from which the reader may make a study of the various systems of marketing milk.

The relation of manufactured milk products to whole milk and the effect of manufactured products on the price situation—a pertinent subject at this time, is treated at length.

The cost of production of milk is ably treated in chapter five.

In part two, Dr. King describes the development of different methods of distributing fluid milk in our large cities. A topic that has been thoroughly taken care of from the economic standpoint.

A chapter is devoted to the food value of milk in part three. Also several chapters explaining how the producer, dealer and consumer can co-operate to solve the problem of a safe milk supply with fairness to all interested.

Dr. King points out in this book why it is to the real interest of the consumer to have the producer properly organized, so as to guarantee an adequate milk supply and the best way that such producers organizations can function to the best advantage.

PUREBRED REPLACES

SCRUB BULL

"I disposed of one scrub bull and five cows that were not profitable." With this explanation a livestock owner in Dodge county, Nebr., enrolled in the "Better Sires—Better Stock" movement which provides for the purebred sires in all classes of domestic animals kept.

A purebred Holstein bull now heads his herd of 25 grade cattle and the Duroc swine on the farm are all purebred. Horses, sheep, goats and poultry complete the kinds of livestock kept. While these are not purebred, they will be improved by breeding to purebred sires only.

The experience of livestock owners that scrub sires are unprofitable supports the results of numerous official experiments which show the superiority of good purebred sires over all other kinds.

Keep as young as your children by drinking milk.

INTER STATE MILK PRODUCERS REVIEW

Official Organ of the
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A. A. Miller, Editor and Advertising Mgr.

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Editorial

What confronts us in the milk market? There has been an element of uncertainty surrounding the situation for more than a month. There is little insight into the future.

The present situation was precipitated by the manufacturers of condensed and powdered milk products. It developed almost simultaneously in nearly all the large producing centers.

The "big interests" announced that they would buy no fluid milk after October first. Some of the manufacturers stated that they would take in farmers milk and make same into butter or cheese for the farmers account. Others would close their plants. In this district some of the condensaries asked for temporary relief.

Some of the large interests, in other territories, refused, it is stated, to make farmers milk into condensed products for the farmers account. Probably there was some method in their stand on this matter. Probably they did not want to postpone the absorption of their already too large stocks.

It is true there has been no market for condensed milk. Exports are practically at a standstill. Large quantities of sweetened condensed milk were made at high sugar prices and are being carried in storage. Sugar prices declined. The condensed milk market weakened and to protect the heavy stocks against decline, the farmer is asked to take a loss.

In other words, the condensers have passed the buck to the farmer.

In this as well as some of the other primary milk markets the dealers have been standing pat. Prices paid for whole milk, by the consumer, are considered fair. In food value, a quart of milk, at present retail selling prices, is materially cheaper than many other elements of food.

There has been no general over production of milk although there was a seasonable over production in this territory during the summer, when pastures

were exceptionally good. The season of short supply is approaching. Milk production, as the cooler weather approaches, will steadily decline.

Why did the condensaries not apply their method of curtailment when the milk was flush, when sugar prices were high and when they already had tremendous stocks?

Dairymen must stand together as a unit through this trying period. We must be prepared for any move. It is a day to day, week to week, month to month proposition. No one can tell just what's ahead.

We hope that present prices will be maintained. If a readjustment comes, we must be prepared to meet it but we must also be prepared to defend our rights.

Co-operation is the watch-word. Co-operate with your neighbor, with your community, with the officers of your local and with the Inter-State Milk Producers Association. We are fighting the battle of every milk producer in the district and should have the full support of not only our members, but every milk producer. We must have the co-operation of every dairyman if the best results are to be obtained from our co-operative efforts.

The uncertainty which confronts dairymen in certain districts, by the refusal of condensing plants to buy whole milk, except at price concessions, or temporarily close their plants, will result no doubt, on the part of some farmers, to the making of butter on the farm.

Some expedient is necessary under the complex conditions existing in the milk market.

There has been a constant shortage of good butter in country towns for a long time. This has resulted in an increasing consumption of butter substitutes, which have had an unfavorable influence on the butter market.

If a number of our farmers would get out their separators and make butter for their local markets, it would not only aid in getting away from the tremendous excess or surplus of milk, largely occasioned by the unprecedented good season for pasture, but it would fill a long felt want in local communities, where butter substitutes have been largely sold on account of a butter shortage.

Butter making on the farm, we are well aware, is a job requiring care and close attention, but with modern machinery, such as the cream separator and the power driven churn, and in these days of power on the farm, a unit can readily be hitched to the churn, the drudgery of the old butter making methods can largely be eliminated.

With modern appliances such as the cream separator on the farm, or owned collectively by a community of farmers, the milk occasionally left on the farm by reason of excessive surplus or by unavoidable causes, could readily be taken care of in such emergencies without any material money loss.

We have been congratulated by many of our readers on the steady improvement in the appearance and value of the Review. We appreciate the comment. Some of our advertisers have also expressed their appreciation of the value of our paper as an advertising medium. We also appreciate this. Here and there we hear of criticism. We also appreciate that and would ask that all these

expressions be continued. Let us hear from you direct. We are not letter perfect.

Our aim is to make the Milk Producers Review a necessity to every dairy farmer. Editorially we endeavor to print news and information which is of real value. Many of our readers have already found the paper to be of such service. From an advertising standpoint, we aim to exclude from our columns all questionable advertisements. We believe all our advertisers to be trustworthy.

The day of the old style plodding farmer has gone. Dairy farming, one of the world's foremost industries, has from necessity, been placed on a higher plane. Those engaged in it must follow modern methods if they do not wish to play a losing game.

The only way to keep posted is to read your Review—read it thoroughly, advertisements as well as general reading matter. You will then keep informed on conditions and what must be done to meet them.

Every issue of the Review contains information of vital interest to you from a dollar and cents standpoint. Don't be caught napping. On page 4 of the September issue we gave you a tip as to the situation in the condensary situation. Did you catch it?

BALTIMORE MILK SITUATION

The first of October finds Baltimore with a greater surplus than any other time since the first of June. This is caused by the splendid pasture we have had during September, the result of the August rains, and to the fact that each producer is trying to establish his fall average, which is determined by the amount of milk shipped during September, October, November and December. The price of milk remains the same, namely, forty cents (\$40) per gallon for 4% milk with a differential of one-half cent per gallon above and below 4% for each 1/10 per cent. butter fat.

There seems to be a tendency towards increased production by a great many new farmers engaging in the dairy business. We have increased our membership to over twenty-five hundred, (2,500) members, many of the ones who recently joined never having shipped milk before. This is due to new truck lines starting and the truck drivers urging the farmers living close to their routes to engage in the milk business.

It now becomes necessary for all the producers organizations to put on a campaign to increase the consumption of milk, and we believe a well organized campaign of this kind will increase the consumption of dairy products so that this would easily take care of the increased production. We would like to see as many dairymen as possible attend the National Dairy Show in Chicago, which will be held during the second week in October.

At these kind of shows and by attending the meetings that are held in connection with this show, we can obtain ideas and see practical things demonstrated which we could obtain in no other way. By putting new ideas in our business and bringing to the public the value of milk as a food and convince the public the true dairy situation we can all greatly improve the dairy industry.

D. G. HARRY.

DIRECTORS MEETING

The directors of the Inter-State Milk Producers Association were called in meeting on September 16th and were also, as a body, in conference with the manufacturers and dealers, on the price situation on the same date.

Routine business largely was transacted. The general situation confronting the milk market was gone over in detail, all phases of the situation were discussed and the conclusion reached that no change in the price—either on the part of the manufacturers or dealers was to be made, unless the situation in other primary markets warranted such a readjustment.

The proposition of the manufacturers in this district, to keep some plants open in September, paying butter basis prices and returning skim milk to their patrons was not sanctioned by the board, which adhered to a stand pat policy, awaiting further developments.

Reports from various committees were received by the board and acted upon.

It was resolved that the presidents and secretaries of the various locals be notified of the serious condition of the milk market, that meetings be called at once, and that through the directors and officers the membership at large be informed of the serious situation confronting the industry.

Further plans regarding the annual meeting and banquet of the association on December 6 and 7 were discussed, which are referred to in another column.

TEMPLE OF AGRICULTURE

A special campaign is being made in New Jersey, Delaware and Maryland to obtain funds required to meet the outstanding indebtedness against the present Temple of Agriculture Building, Washington, D. C. The State of Pennsylvania has already contributed over \$15,000—the work being done through the Granges.

This is purely a farmers affair. Most of the other states are collecting their quota of funds but some few have made no concerted effort to raise their share. Thirty thousand dollars must be obtained this fall.

The Temple of Agriculture houses the National Board of Farm Organizations, and is, as well, the headquarters of the National Milk Producers Federation and other national farm organizations.

The force of the farmer is recognized in national affairs—collectively we can obtain objects for the farmers welfare—but we must not be handicapped financially. A large number of the Granges have done wonderful work in this connection. Where Granges are not active Milk Producers Organizations should take up the work.

Every farmer should contribute in proportions to his ability.

The officers of our locals are authorized to receive subscriptions, which will be forwarded through the Inter-State Milk Producers Association to the National Board.

This is a necessary project for the welfare of agriculture. Send in your subscription and see that your neighbor does likewise.

Were you enumerated in the census,

Sarah?

Washer woman—(who failed to show

up last week.) Deed I didn't honey,

haven't had a drop to drink since last

July.

LATEST MARKET PRICES

Philadelphia Milk Prices

Test	Price per 100 lbs.	Basic Quantity Price per quart	Price for all milk above the Basic Quantity
3.1	\$4.20	9.1	6.5
3.2	4.24	9.2	6.6
3.3	4.28	9.3	6.7
3.4	4.32	9.4	6.8
3.5	4.36	9.5	6.9
3.6	4.40	9.6	7.0
3.7	4.44	9.7	7.1
3.8	4.48	9.8	7.2
3.9	4.52	9.9	7.3
4.0	4.56	10.0	7.4
4.1	4.60	10.1	7.5
4.2	4.64	10.2	7.6
4.3	4.68	10.3	7.7
4.4	4.72	10.4	7.8
4.5	4.76	10.5	7.9
4.6	4.80	10.6	8.0
4.7	4.84	10.7	8.1
4.8	4.88	10.8	8.2
4.9	4.92	10.9	8.3
5.0	4.96	11.0	8.4

When milk is not tested the price f. o. b. Philadelphia is 10 cents per quart

RECEIVING STATION PRICES

Less Freight and Receiving Station Charges

Miles	Price per 100 lbs.	Price per 100 lbs. surplus milk at all receiving stations
1	\$3.70	2.41
11	3.68	2.45
21	3.66	2.49
31	3.65	2.53
41	3.63	2.57
51	3.61	2.61
61	3.60	2.65
71	3.59	2.69
81	3.57	2.73
91	3.56	2.77
101	3.55	2.81
111	3.54	2.85
121	3.53	2.89
131	3.51	2.93
141	3.50	2.97
151	3.49	3.01
161	3.48	3.05
171	3.47	3.09
181	3.46	3.13
191	3.45	3.17
201	3.44	3.21

Freight rates on basic milk deducted on a basis of 46 quarts—113 per cent. of 40 quarts, plus 3 per cent. war tax. Four-tenths of a cent added or deducted for each tenth of one per cent. butter fat above or below 3 per cent.

October Milk Prices

Subject to change whenever warranted by market conditions
P. O. B. Philadelphia

Test	Price per 100 lbs.	Basic Quantity Price per quart
3.1	\$4.20	9.1
3.2	4.24	9.2
3.3	4.28	9.3
3.4	4.32	9.4
3.5	4.36	9.5
3.6	4.40	9.6
3.7	4.44	9.7
3.8	4.48	9.8
3.9	4.52	9.9
4.0	4.56	10.0
4.1	4.60	10.1
4.2	4.64	10.2
4.3	4.68	10.3
4.4	4.72	10.4
4.5	4.76	10.5
4.6	4.80	10.6
4.7	4.84	10.7
4.8	4.88	10.8
4.9	4.92	10.9
5.0	4.96	11.0

When milk is not tested the price f. o. b. Philadelphia is 10 cents per quart

RECEIVING STATION PRICES

Less Freight and Receiving Station Charges

Miles	Price per 100 lbs.	Basic Quantity Price per quart
1 to 10 incl.	3.70	2.41
11 to 20 "	3.68	2.45
21 to 30 "	3.66	2.49
31 to 40 "	3.65	2.53
41 to 50 "	3.63	2.57
51 to 60 "	3.61	2.61
61 to 70 "	3.60	2.65
71 to 80 "	3.59	2.69
81 to 90 "	3.57	2.73
91 to 100 "	3.56	2.77
101 to 110 "	3.55	2.81
111 to 120 "	3.54	2.85
121 to 130 "	3.53	2.89
131 to 140 "	3.51	2.93
141 to 150 "	3.50	2.97
151 to 160 "	3.49	3.01
161 to 170 "	3.48	3.05
171 to 180 "	3.47	3.09
181 to 190 "	3.46	3.13
191 to 200 "	3.45	3.17
201 to 210 "	3.44	3.21

Prices for milk above basic quantity based on 120 per cent. of the average monthly or semi-monthly price of solid packed 92 score creamery butter, New York City, in May, June and July an increase of 10 per cent. and in August an increase of 5 per cent. in the basic quantity of milk shipped is allowed.

SURPLUS BASIS PRICES

4 per cent. milk at all receiving points

Month	First half	Average
January	\$3.16	\$3.12
February	3.20	3.18
March	3.14	3.19
April	3.55	3.45
May	2.96	3.00
June	2.71	2.76
July	2.76	2.76
August	2.61	2.64
September	2.78	2.81

OCTOBER COMPARATIVE PRICES PAID

PRODUCERS

Eastern Territory

4 per cent. butter fat, per 100 pounds

Philadelphia, 50 mile zone

New York, 200 mile zone

Pittsburgh, outlying points

Baltimore, per gallon f. o. b.

RETAIL MILK PRICES

Pasteurized and bottled

Subject to Board of Health Regulations

Grade B or Market Milk

Quarts Pints

Philadelphia

New York

Baltimore

Pittsburgh

PRICES PAID PRODUCERS

f. o. b. dealers station

And retail selling prices, Market Milk, nearby

cities and towns

Producers

Quarts

Quarts

Philadelphia

Camden, N. J.

Easton, Pa.

Harrisburg, Pa.

Norristown, Pa.

Reading, Pa.

Trenton, N. J.

West Chester, Pa.

York, Pa.

AUGUST BUTTER PRICES

92 score solid packed creamery butter,

cents per pound

New York

1 56 1/2

2 56 1/2

3 57 1/2

4 57 1/2

5 57 1/2

6 58 1/2

7 58 1/2

8 58 1/2

9 58 1/2

10 58 1/2

11 58 1/2

12 58 1/2

13 58 1/2

14 58 1/2

15 58 1/2

16 59 1/2

17 59 1/2

18 59 1/2

19 59 1/2

20 60 1/2

21 61 1/4

22 61 1/4

23 61 1/4

24 61 1/4

25 61 1/4

26 61 1/4

27 61 1/4

28 61 1/4

29 61 1/2

30 60

"THE PRICE OF MILK"

By CLYDE L. KING, Ph.D.

Honor and Profit for Mr. Dayett

We have said that a large number of leaders in cow testing associations are Unicorn users.

J. Irvin Dayett is one of these. He is a member of the Diamond State Cow Testing Association of Delaware.

For the year ending August 1, 1920, his herd stood first in average yield of both milk and fat for less than ten cows:

Milk 12,271.0 lbs.
Fat 416.4 lbs.
Average profit per cow, \$186.63

His herd contained the champion producers of both milk and fat:

	Milk	Fat
Cow No. 7 . .	15,101	488.2
Cow No. 9 . .	13,691	519.1

Mr. Dayett feeds Unicorn and gives it much credit for his success. Credit is equally due to his good cows and to his skill in feeding.

From the annual report of the Association we copy the following:

"The question of whether or not it pays to feed cows heavily when the price of grain is so high has been answered through this year's work. In every case where heavy feeding has been practiced a good profit has resulted"

It pays to feed Unicorn to your cows.

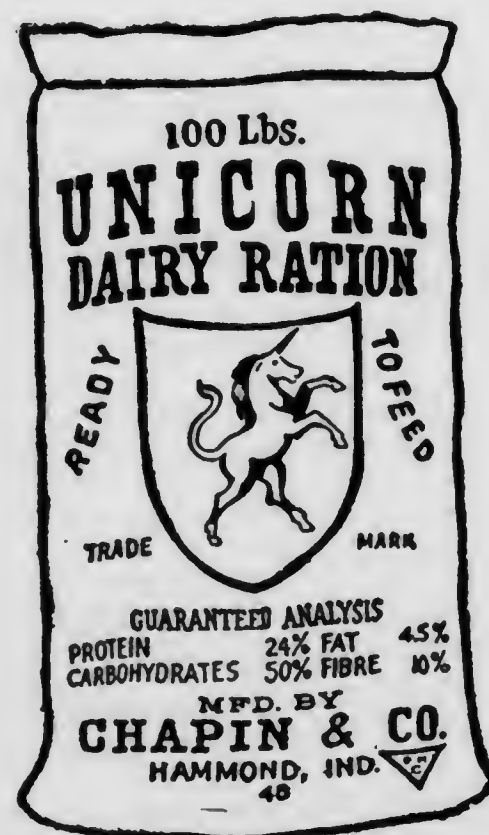
CHAPIN & COMPANY, Chicago

"Better Sires—Better Stock"

We will award a money prize of \$1,000 to the county that first eliminates its inferior sires.

This prize will be awarded under rules provided by the Bureau of Animal Industry, United States Department of Agriculture.

Detailed information on request.



Cash In On This Feed NOW!

It has been proved again and again that International Special Dairy Feed is remarkable in its milk-making and health-building qualities. Profit by the experience of thousands of dairymen and put International Special Dairy to work for you. The results are sure.

INTERNATIONAL SPECIAL DAIRY FEED

Makes Every Cow a Profit Maker

— and that goes for prize cows and for scrubs, too. Year after year on a large number of farms International Special Dairy Feed is fed as regular as clockwork. Its best recommendation is that it produces more milk daily for others. International Special Dairy Feed is made of carefully selected high grade materials. Yet it costs less than home grown grains. Try it on your herd. Sold by good dealers everywhere.

INTERNATIONAL SUGAR FEED COMPANY
Mills at Minneapolis and Memphis
MINNEAPOLIS, MINN.
Live Agents Wanted

MILK: A PERFECT FOOD

By C. Lincoln Furbush, M. D.
Director Department of Public Health,
City of Philadelphia.

Reports from various child welfare organizations indicating that a large percentage of the children coming under their care are undernourished and below par physically has caused leading infant and child health organizations to carry on a nation-wide campaign urging the public to use more milk.

In spite of its increased cost, milk still remains one of the cheapest, most easily digested and most nourishing foods. With its other byproducts, it comprises about one-sixth of all foods eaten by the average family. One glass of milk is equal in value to either two large eggs, a large serving of lean meat, two moderate sized potatoes, five table-spoonfuls of cooked cereal, three table-spoonfuls of boiled rice, two slices of bread.

This food product is generally considered a perfect food because it contains all the elements of a balanced ration. It also contains ferments which are valuable in digestion. The average proportion of these constituents is as follows: Albumen, 4½ per cent.; butter fat, 3½ per cent.; sugar, 4½ per cent.; salt, ½ per cent., and 87 per cent. of water.

To be healthful and wholesome, however, milk must be clean and free from disease-breeding germs. Under usual circumstances milk contains many bacteria, but these are harmless and often beneficial. When in large numbers they indicate that the milk has been imperfectly handled, that it is dirty or that it has not been kept at a sufficiently low temperature. The number of germs in milk is an index as to its sanitary quality. That determines the grade of milk, which is designated as pasteurized, certified, inspected and market milk.

Dirty milk containing large numbers of bacteria spoils readily through fermentation or putrefaction. The former is commonly called souring, while the latter is a decomposition, rendering it useless as food. Sour or curdled milk is not necessarily harmful and for grown people, if obtained from clean, pure milk, may be as nutritious and wholesome as fresh milk. The bacteria which cause it

(Continued on page seven)

The Fifteen Leading Guernseys Now Living

A list of leading Guernsey cows that were living on June 30, 1920, has recently been prepared by the American Guernsey Cattle Club. The names of these cows, together with the records of production and ages, are given in the following table:

	Lbs. Milk	Lbs. Butter	Age
		Fat	Yrs. Mo.
1. May Rilma, 33761	19,673.00	1,073.41	13 6
2. Nella Jay, 4th, 38233	20,709.90	1,019.25	8 7
3. Langwater Nancy, 27943	18,783.50	1,011.66	11 5
4. Langwater Hope, 27946	19,882.00	1,003.17	11 1
5. Yeksa's Tops Gold's Fannie, 22362	19,794.90	981.53	14 4
6. Bijou des Fances (Imp.), 44541	17,104.00	943.41	9 7
7. Belladia, 31909	19,631.90	934.05	11 10
8. Cinderella Josephine, 34500	19,460.50	909.05	9 5
9. Pearl Rose of the Glen, 47414	16,855.60	884.21	6 8
10. Ada Taylor, 29340	15,980.30	877.70	10 10
11. Jehanna Chene, 30889	16,186.70	863.36	10 10
12. Lynchmere Marie (Imp.), 54018	15,709.50	854.80	7 4
13. Duchess Ruth, 47060	14,644.20	850.49	9 7
14. Monobelle, 40879	16,724.50	847.64	8 0
15. Beauty Eagle, 18117	16,144.00	846.31	16 3

Losses in Milk Transportation

Many losses occur during the transportation of milk from the farm to the city plant. A great deal of this loss is avoidable, and better co-operation between milk producers, dealers and transportation agencies will serve to minimize this evil.

Losses are of two kinds: Those due to milk souring in transit, and those which are mechanical, such as theft, spoilage, leakage, etc. While the milk dealer's legal responsibility may be confined to the period during which the milk is in his possession, his interest should extend farther, and he should do everything in his power to aid in correcting faulty methods all along the line.

Every year farmers experience much dissatisfaction because of deductions for sour milk and milk supposedly lost in transit. It will pay dealers to make sure that their "hands are clean" in this respect. Many times farmers have just cause for complaint. This division has observed that dealers not always accord "railroad" milk the best possible treatment. Milk is sometimes allowed to stand for considerable periods on the platforms at city railroad terminals. Furthermore, when trucked to the plant, milk is not always promptly handled or placed in cold storage at once. Instances have been known where milk was allowed to stand in cans in the summer heat for 3 or 4 hours. Such practices, clearly the dealer's fault, tend to produce high bacteria counts and sour milk.

Dealers can help educate the farmers to cover cans at the country shipping station until the train arrives. They can advise the sealing of cans to prevent theft and undue losses due to covers coming off. When the milk arrives in the city it should be taken at once from the railroad platform and covered during transportation to the plant. On arriving at the plant it should either be handled promptly or placed immediately in cold storage rooms or cooled vats.

Dealers should instruct drivers and other employees to avoid spilling milk, especially before it is weighed or measured. Such losses are the dealer's fault, but sometimes the farmer suffers. Make sure that the weigh scales are accurate and have them frequently tested. Cans should be drained thoroughly so that all possible milk may be recovered.

Observance of the foregoing suggestions will result in smaller losses and a greater spirit of good feeling between producers and dealers.

*U. S. Department of Agriculture, Dairy Division, Milk Plant Letter, No. 78.

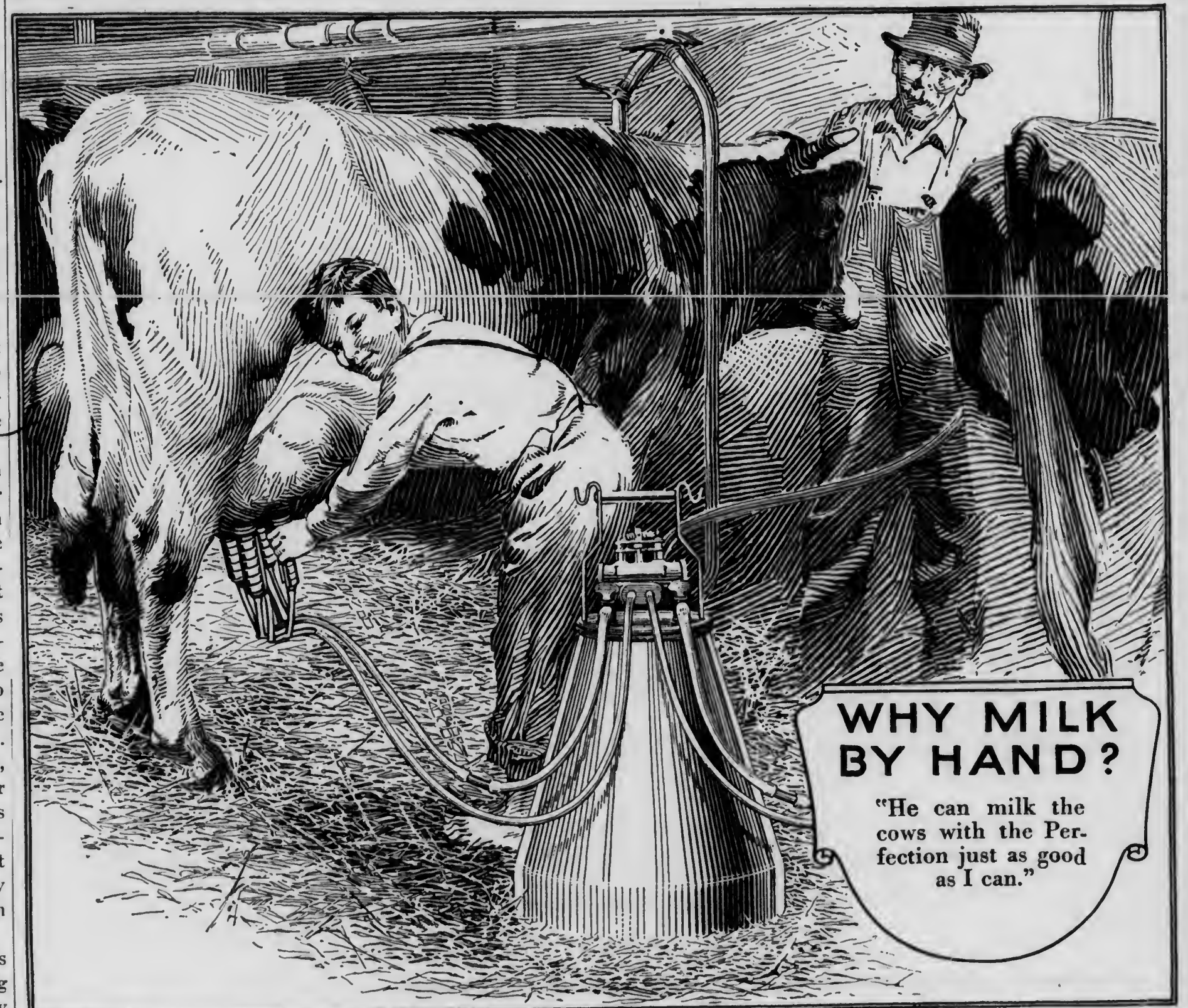
Milk a Perfect Food

(Continued from page six)

to become sour have a beneficial effect upon the digestive functions of the intestines.

When the fat is removed from milk the byproduct is called skim milk. It is nine-tenths water, but in spite of this fact it is very nutritious. Its chief nourishing contents are albumen and sugar. Two and a half quarts of skim milk contain almost as much albumen and yield about the same amount of energy as a pound of beef. It must be obtained from pure milk in order to be safe food.

Buttermilk is another valuable and wholesome byproduct of milk which has the food value of skim milk and the added advantage of milk acids.



"My 13 year old son milks the cows with the Perfection as well as I can and is back in the house in one hour from the time he leaves it." —V. D. CUMMINGS

Interest Your Boy In Milking

DID you ever notice the interest your boy takes in fine machinery? Why not use that interest to solve your milking problem.

With a Perfection your young son can save you the wages of one or two men. Perfection more than pays for itself each year in the wages it saves.

Get a Perfection and interest your boy in being an up to date dairy farmer. He will like the farm and be glad to stay when the drudgery is gone and he has the best

labor saving machinery to work with. And he will do a better job of milking when he milks the Perfection way, because Perfection milks nature's way.

Perfection's gentle suction followed by a downward squeeze and a period of rest duplicates perfectly the action of the calf.

Send for Catalog

Write for the names and addresses of Perfection owners near you. We'll also send you a free copy of our book, "What the Dairyman Wants to Know." Why milk by hand?

Perfection Manufacturing Company

2168 East Hennepin Avenue

Minneapolis, Minnesota

PERFECTION MILKER

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS



The Empire is the only milker —that—

—massages the cows teat on three sides. That stimulates good blood circulation and tends to increase the cow's milk production.

—massages the cows teat gently, regularly and completely from tip to udder. That keeps the cow's teat in good healthy condition. The cows seem to give down more easily to the Empire.

These are but two of many patented, exclusive Empire features. They mean everything for successful machine milking. If the Empire wasn't a better milker why is it we find more Empires in use? It is! We can prove it.

Eastern Sales Company
Farmers and Mechanics Bldg., West Chester, Pa.
PHONE 699W



Lewis Linseed Oil Cake

is all quality. Mix it with your home-grown grains and you have an ideal feed for your cattle.

Write for mixing directions.

The Fat and Protein content of LEWIS LINSEED OIL CAKE is particularly desirable for the Winter months. Your cows will thrive on its nourishing qualities.

LEWIS LINSEED OIL CAKE can be bought already ground if you prefer it that way. It is known as LINSEED CAKE MEAL.

Ask your dealer about it. If he doesn't carry it, write us.

John T. Lewis & Bros. Co.

705 Lafayette Bldg. Philadelphia, Pa.

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS

THE FAIR PRICE OF MILK

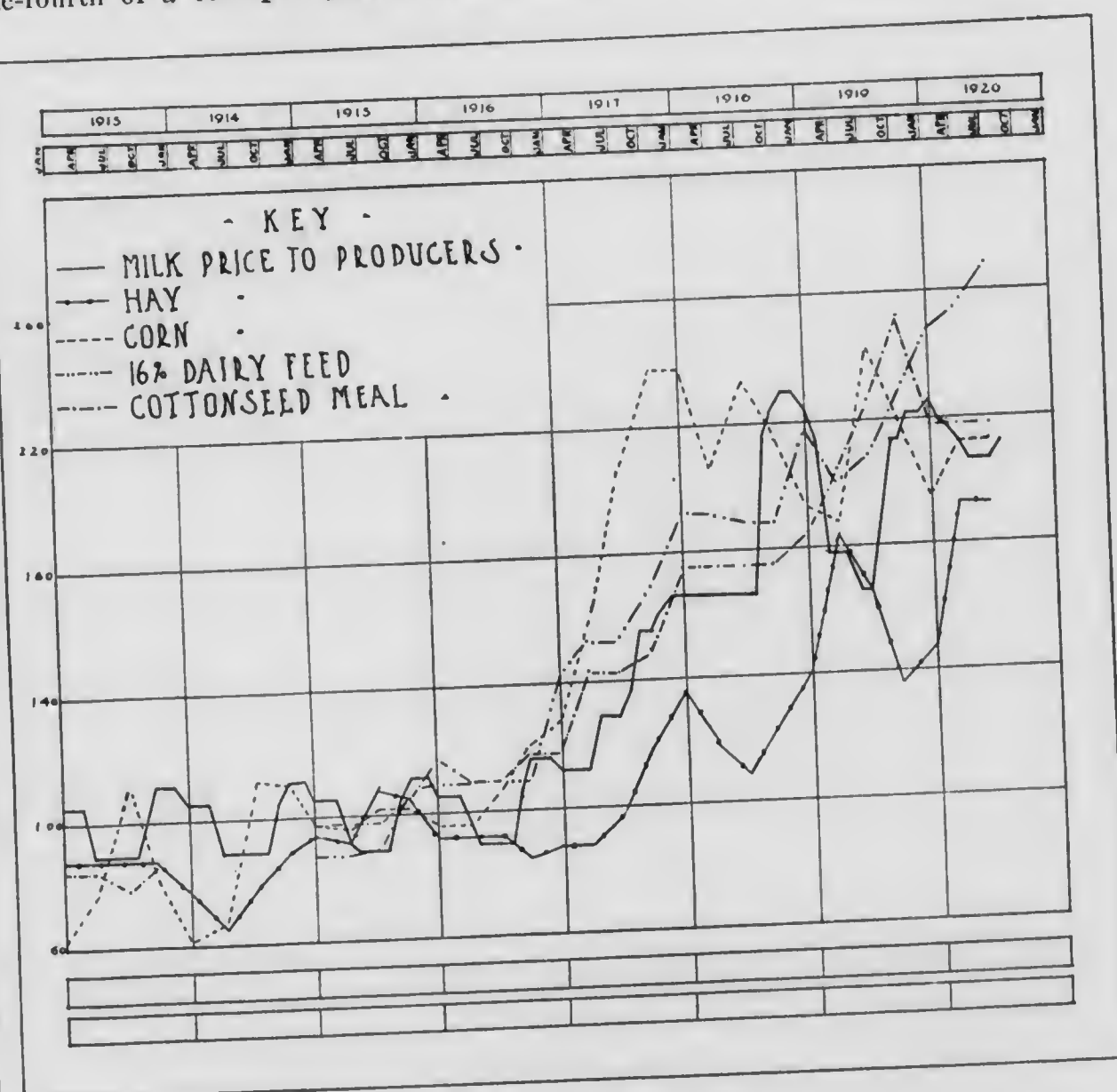
(Continued from page 1)

The representatives of milk producers who have met with me have taken reasonable positions as to the need for stabilizing prices to consumers.

The price of milk to the consumer the past year has been kept at 16 cents per quart particularly because of the co-operation of the milk dealers. The portion of the price to the consumer taken for the dealers costs and profits was about 25 1/2 cents a gallon for the first six months of 1920 as compared with 25 cents a gallon for the first six months of 1919. For the twelve months ending July 1, 1920, however, the spread averaged 25 1-3 cents per gallon as compared with 26 1-3 cents per gallon for the year ending July 1, 1919. The decrease in spread was really one-half rather than one-fourth of a cent per quart because

the dealer purchased on a butter fat basis the past year. This decrease was during a year when costs of bottles and of equipment were rising rapidly. Every person familiar with business facts at all knows that this represents an accomplishment by the milk dealers in Baltimore of no mean significance to every producer and to every consumer in the city. It means that all of the advance in the average price paid for milk in this past year by the consumer went to the farmer and one-half of a cent per quart more.

Such facts as these speak for themselves. Certainly the consumer has no basis in fact for complaint. Farmer and dealer have done well their part toward a fair milk price in the City of Baltimore.



APPENDIX

In the table below I give the wholesale price of stated feeds quarterly from 1913 to 1920 and the relative increase in those feed prices in each succeeding year over 1913:

Price of Feeds f. o. b. Baltimore—1913-1920

		HAY—(Ton) Actual							
		1913	1914	1915	1916	1917	1918	1919	1920
January	\$20.00	18.00	21.50	21.00	20.00	31.00	32.00	33.50	33.50
April	20.00	15.00	21.00	21.00	20.00	27.00	27.00	42.00	44.00
July	20.00	18.00	24.50	21.00	22.50	25.00	38.00		
October	22.00	20.00	24.00	19.50	27.00	28.00	31.00		
Yearly Average	\$20.50	17.75	22.75	20.50	22.25	27.75	35.75	38.75	
% Inc. over 1913		13	10	00	08	35	74	89	
		CORN—(Bushel) Actual							
		1913	1914	1915	1916	1917	1918	1919	1920
January	\$0.56	.55	.88	.87	1.15	2.15	1.75	1.76	
April	.70	.60	.87	.86	1.49	1.85	1.70	1.90	
July	1.00	1.00	.93	.96	1.87	2.10	2.20	1.90	
September	.75	.90	.93	1.08	2.15	1.95	1.98		
Yearly Average	\$0.75	.76	.90	.94	1.69	2.01	1.90	1.85	
% Inc. over 1913		1	20	25	125	168	153	148	
		COTTONSEED MEAL—(Tons) Actual							
		1913	1914	1915	1916	1917	1918	1919	1920
January	\$30.00	36.00	43.00	43.00	64.00	67.00	79.00		
April	30.00	36.00	40.00	52.00	64.00	75.00	79.00		
July	29.00	36.00	40.00	52.00	64.00	82.00	79.00		
September	31.00	38.00	43.00	54.00	64.00	92.00			
Yearly Average	\$30.00	36.50	41.50	50.25	64.00	79.00	79.16		
% Inc. over 1913		17	27	66	53	136	142		

(Continued on page 14)

NEIGHBORLY CHATS

By N. S. Gotschall

The Noble's Pay Blackburn's a Visit.

It was on Wednesday evening, just one week after Winnie Blackburn and Cyrus Noble had their interesting conversation regarding balanced rations, Milk Producers' Associations, Cow Testing and Breeders' Associations. The Blackburn family was seated around the open fire place, when suddenly little James, looking up from his story book said: "Papa there is someone out, I heard a team come into the yard." The father dropped his paper and mother Blackburn paused with her knitting to listen for the sound. "It is Cyrus," remarked Mr. Blackburn, when he heard a hard voice. He lost no time in slipping into his coat and in an instant was out to meet their neighbor. He was glad to learn that Noble had brought the whole family, which included Mrs. Noble and two boys, Robert, aged 20, and Curtis, a lad of 16.

They had scarcely removed their wraps when Cyrus Noble said: "Well Winnie, we made up our minds to come over tonight to talk about this feeding problem or your balanced rations as you called it last Wednesday morning. I spoke of our talk to my family that evening when Robert informed me that he read about this balancing of dairy rations in a farm paper at his uncle's house several months ago."

"Do you mean to tell me that no farm paper comes to your house," interrupted Blackburn, speaking in bold, frank tones. "How do you get along without them?"

"What is the use in paying out good money for something we haven't time to read? It keeps us busy making both ends meet when I devote all my time to work. Then how do you suppose I could possibly do it if I would take time to read the paper," answered Cyrus.

"That is a common weakness with farmers," came the reply. "We read too little. Is it not a fact that by a little forethought and a bit of time devoted to studying newer methods of farming we can save much money and energy in the end?"

"There is a good deal of truth and common sense in that and I never thought of it in just that way before," said Cyrus, looking a bit humiliated. "I know now why you are so well versed in feeding and farm organizations' activities," continued Cyrus. "It is because you take time to read about those things which mean much money in your pocket," his face again growing brighter. "Now Mr. Blackburn, let us talk about those balanced rations for dairy cows," said Cyrus, as he moved his chair a bit farther away from the open fire place.

"Well sir! since you never heard of it before last Wednesday morning I must go somewhat in detail," started Blackburn, as he moved his specks. "A cow is like a machine of a very complex nature. The milk she produces contains a certain amount of food materials which must be supplied her in the feed she eats. Scientists have further discovered through experiments that to produce a certain quantity of milk required a definite amount of the three main food nutrients, namely protein, carbohydrates and fat, in a definite proportion and that where our feed lacks in any one of these, less milk

is produced and when an excessive amount of either some will be wasted.

"I expect you know that feeds differ greatly in the content of these different food nutrients and we should always choose the feeds which, when mixed in the proper proportions, will supply in the right amounts and proportions those three food nutrients." With this Mr. Blackburn began to figure out on paper to illustrate what he meant. He used as an example, the feeds Noble was feeding and compared them with a balanced feed. To the amazement of Noble, he pointed out how he might have saved several hundred dollars a year by proper feeding. This last set of figures startled not only Cyrus Noble, but his two sons as well, even though both Robert and Curtis were very silent throughout the whole conversation, yet were very attentive to what was said, so much so that Robert had grasped the method of calculating such rations and assured his father that by a little reading and practice work he could work out the proper mixture of feeds for dairy cows.

"Now I understand why dairying has been so unprofitable over in our valley," said Cyrus. "First, we lost out by improper feeding and secondly, because we do not sell our milk through the organization you were talking about," continued Cyrus, more earnestly than before.

"Well," answered Blackburn, "if you will decide upon a date and place of meeting, I will arrange for a speaker."

Just then the clock in the hall struck which attracted the attention of Mrs. Noble, who was discussing with Mrs. Blackburn the woman's problems on the farm. "We must be going," she said Cyrus looked at his watch and could scarcely believe his eyes. "Is it possible?" he said, "that we have talked so long?"

As they were putting on their wraps. Mr. Blackburn said to Robert and Curtis, "Well, boys, I hope you will help your father in mixing up his dairy feeds." Whereupon both replied: "You bet we will."

As they walked out to the carriage, Noble expressed his gratitude toward Mr. Blackburn for his instruction and assured him that he would arrange for the meeting in the near future.

INSPECTORS GIVE GRAIN-GRADING INFORMATION

By familiarizing themselves with the grain grades under the Federal grain standards act, farmers can be sure when selling their grain that the standards are being properly applied. Any information in this connection may be had by writing or visiting the nearest office of Federal grain supervision. In case any person desires to check up his determination of the grade of the grain when no licensed grain inspector is located in the community, he can mail a representative sample to the nearest licensed grain inspector and have it officially inspected. The sample should be at least 2 quarts in size of which at least 1 1/8 pints should be placed in an air-tight container and the remainder in a clean cloth sack. While the grade applies to the sample only, the parties to a transaction involving the sale of grain at country points may agree that the grade of the sample will apply to the entire lot to be sold.

Drink a glass of milk at this day's lunch.

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS



THE cows surely like Union Grains—and that's Nature's way of showing that it's good for them. It contains just the right elements to make cows happy and healthy, with the big flow of milk that it is sure to bring.

Hundreds of the most successful dairymen who are feed experts themselves use Union Grains because in careful tests in which they weighed the milk and figured the cost of feed—Union Grains proved itself more economical.

It saves the time and trouble of mixing, too, and makes it possible to use that time to better advantage. Feed Union Grains and you know the feed is always right. Know where you make and where you lose money by keeping a Ubiko Cost Sheet. It will tell you which feeds and which cows pay best. Write for it. It's free.

We also make Ubiko Calf Meal, Ubiko Stock Feed, Ubiko Pig Meal and Ubiko Poultry Feeds.

THE UBIKO MILLING COMPANY

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IMPROVE YOUR HERD

Cut Out the Boarders—With the high cost of feeds dairying is a close proposition. Replace the poor milkers with cows you raise yourself and know what they will do. The best for this purpose is



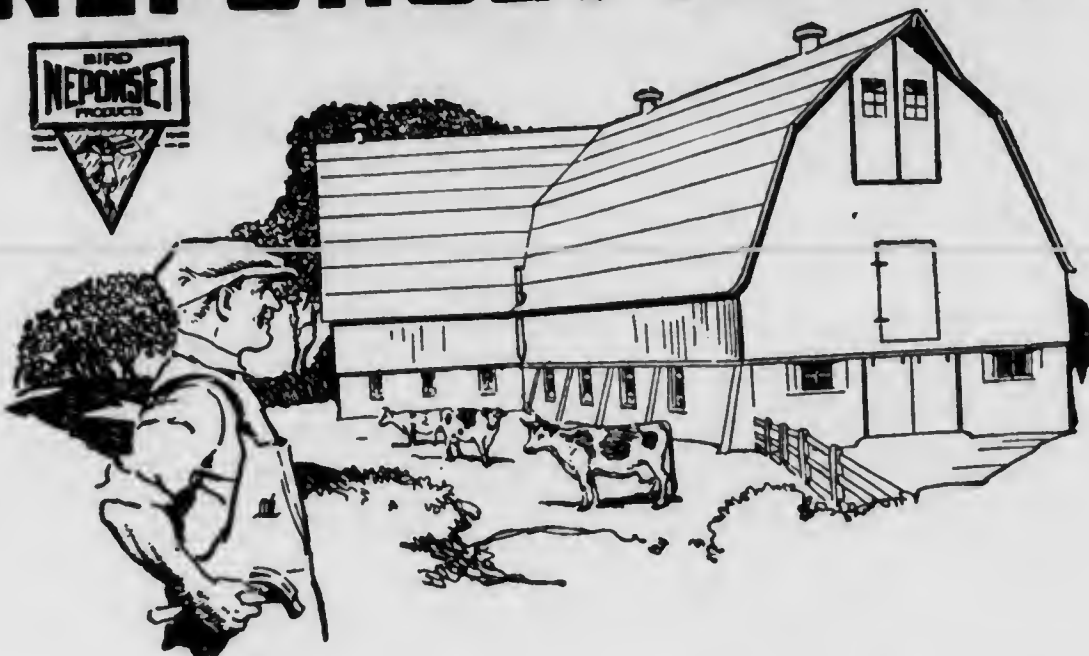
Ryder's Cream Quality Calf Meal
A complete food for young calves. Supplies them with every feeding element necessary for rapid growth in the most easily digested form. They thrive on it as on nothing else. Results Guaranteed.
Saves Milk Saves Calves
Costs Much Less to Feed
Sold in spotted bags that hit the spot with calves.
Ask your dealer or write
RYDER & CO. CHICAGO, ILL.

International
MOTOR TRUCKS
FOR LOW COST HAULING
Farm Operating Equipment
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OF AMERICA
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No food is so cheap as milk—no medicine half so potent as milk. Milk is health insurance, good health is life insurance.

One hour's work will buy more milk than ever before. Faulty diet slays millions—milk saves thousands.

NEPONSET ROOFS



In the long run Bird's Neponset Paroid is the cheapest roofing to use

Twenty years without a single repair is not an unusual record for a Paroid Roof.

That's why we say that Paroid is the cheapest roofing to use.

Paroid comes in natural gray. Every roll complete, with nails and cement. If your dealer does not carry Paroid we will ship direct to you.

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Prest-O-Lite

STORAGE BATTERY SERVICE

Prest-O-Lite Service Prevents Costly Repair Bills

YOUR storage battery should be tested regularly. Perhaps it needs repairing—who can tell? There's one sure way to find out. Call and let us test your battery today. Should a test indicate the necessity for repairs, we have a service battery for you to use while the work is being done. You have the continuous use of your car. When your battery is ready we will notify you promptly. You will be agreeable surprised at the moderation of our charges in these days of high prices.

Pusey-Young Storage Battery Station

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THE DAIRY LABORATORIES

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Consulting and Analytical Chemists
Complete Chemical and Bacteriological Analysis of Milk, Dairy Products, Foods and Waters

FLY SPRAY TO KEEP FLIES OFF DAIRY CATTLE

Chlorine Solution to Sterilize Milk Utensils Write for information
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MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISEMENTS

ANNUAL MEETING

Bear in mind that the annual meeting of the stockholders, which includes every member of the Inter-State Milk Producers Association, will be held in Philadelphia, on December 6th and 7th, 1920. The place and hour of meeting, speakers who will address you and detailed information in general, will be announced in the next issue of the Review. Six directors are to be elected to fill expired terms. Other important matters of business nature will come up for attention.

The Inter-State Milk Producers Association is your organization. Its for your own interest and protection. You have a voice in the selection of the directors who conduct its business. You should exercise that right. Attend the meeting, voice your opinions. See how the business is done and take an active part.

We should have the co-operation of every member. Come individually, if you can't come yourself see that your district is represented. Urge your local to send at least two delegates and let them have proxies, so that your vote will count.

On the evening of November 6th there will be an annual subscription banquet. You don't want to miss this. Bring the good wife along—she would enjoy it. There will be good speakers—good eats—good music. Get together meetings of this character and co-operation.

We will also plan trips visiting some of the large plants showing you how the milk is handled after it leaves your hands. The preparation of the city's milk supply is an interesting proposition.

Keep the dates in mind—Monday and Tuesday—December 6th and 7th. Banquet, Monday night. Make your plans to be present.

THE ADVANTAGE OF RAISING HEIFER CALVES

Many farmers in the past have disposed of their calves and bought cows to maintain their herds, on the theory that it was easier to purchase dairy cows than to raise them. This, however, is not good practice as is shown by Professor W. A. Henry, of the Wisconsin Agriculture College, from whom we quote as follows:

"The profitability of dairying depends to a large degree upon the careful rearing of heifer calves from the best cows in the herd and sired by the pure-bred bulls of quality. Improvements of the herd can best be made by replacing the discards with well-bred home reared heifers of greater productive capacity. Starting with common cows one may by this means in a few years build up a high producing herd. On the other hand, the dairyman who replenishes his herd by purchasing must pay high prices for the animals, which though of good appearance, may not be well-bred or of good productive capacity.

Another important reason for rearing the heifer is that it is much easier to keep the herd free from disease, such as tuberculosis and contagious abortion when the heifers are home raised than when they are continually being brought in from outside sources. Though the value of the calf at birth depends primarily upon its breeding, the feed and care it receives while young are fully as important a factor in deciding its future usefulness in the herd."

September Milk Conditions

(Continued from page one)

The price of surplus milk for September shows an advance of 17 cents over August, being \$2.61 per hundred pounds at all receiving stations or 7.4c per quart f. o. b. Philadelphia, based on 4 per cent. butter fat milk. The average price for surplus milk for the nine months of the current year was \$2.99 per hundred for 4 per cent. butter fat content. The average price for basic milk for the same period was \$3.39 per hundred weight. On a weighted average of 60 per cent. basic and 50 per cent. surplus the average price for the past nine months was \$3.13 per hundred weight. During the same nine months of 1919 the average price paid for all milk was \$3.03 per hundred. These figures all being based on prices at receiving stations in the 50 mile zone.

The butter market has been steadily gaining in strength. Early in the month the market for 92 score, solid packed creamery butter was around 57 1/2 cents. There was an almost steady advance, the high point of the market being at the close of the month when it ruled around 60 cents. Foreign butter continues to be imported in considerable quantity, but reports indicate that it is being held for a higher market.

WRIGHTSTOWN (N. J.) LOCAL

The Wrightstown, New Jersey, local held a meeting on September 13th. David S. Crowshaw presided. A number of prominent producers were present and the general milk situation was discussed. This local has increased its membership so that it now stands very close to the 100 per cent. mark. The organization work was done through the efforts of the local members.

Frederick Shangle treasurer of the Inter-State Milk Producers Association, attended the meeting and made a short talk on the subject of organization and the general milk situation.

FARM BUREAU NEWS

Livestock Survey

An outgrowth of the picnic at Lenape, August 23rd, is the Livestock Survey of all Chester county farms. The survey is sponsored by the Chester County Livestock Breeders Association, co-operating with the State College, State Department of Agriculture and the Farm Bureau.

During the last two weeks survey blanks were distributed so that the fifty-seven townships all have been supplied. The survey in each township is in charge of one man who is responsible.

Chester county should be proud of the attention she is drawing from all over the state. This is the first survey for livestock improvement to be attempted by any county in the state and we believe in the country. Like all good business methods it gives a thorough knowledge of field conditions before any work is attempted.

The information sought is purely for use in improving livestock in the county. It will show where pure bred sires are, where scrub sires are used, and the farms that are improving their herds. It is pleasing to see the splendid co-operation of the people responsible for the work. The attitude and willingness of the farmers to give the information shows that they have grasped the idea of the survey and what it will mean to them in the future.

Be Sure That You Have a Cream Separator

THERE never was a time when you needed a separator as much as *right now*. With the uncertain market for your whole milk, a dependable cream separator is the best investment you could make, because it is positive insurance against loss.

No dairy farm should be without a cream separator, regardless of how you ordinarily market your milk.

And why the *Sharples* Suction-feed Separator?

Not only does the *Sharples* Suction-feed provide such insurance against market conditions, but it also eliminates the smaller losses in butterfat of which all other types of separators are guilty.

The patented *Sharples* Suction-Feed is the *only* separator that *skims clean at any speed*. The

other kind—fixed-feed separators—due to their obsolete mechanical principle and construction, *lose butterfat when turned under-speed*.

Countless tests have proved that 95% of the separators in use are turned slower than the rated speed. But slow or fast, the *Sharples* Suction-feed skims clean just the same.

In addition to the exclusive suction-feed principle, the *Sharples* gives you the decided advantage of a simple, one-piece bowl (no discs to wash), a knee-low supply tank, and automatic oiling system.

Remember, it is costing you more to be without a *Sharples* Suction-feed than it would to buy one.

See your nearest *Sharples* dealer. He will give you *REAL* service—and we back him up to the limit.

Sharples

SUCTION-FEED CREAM SEPARATOR

Write us for catalogue and copies of letters from other practical dairymen who have endorsed the *Sharples* Suction-feed as the world's best.

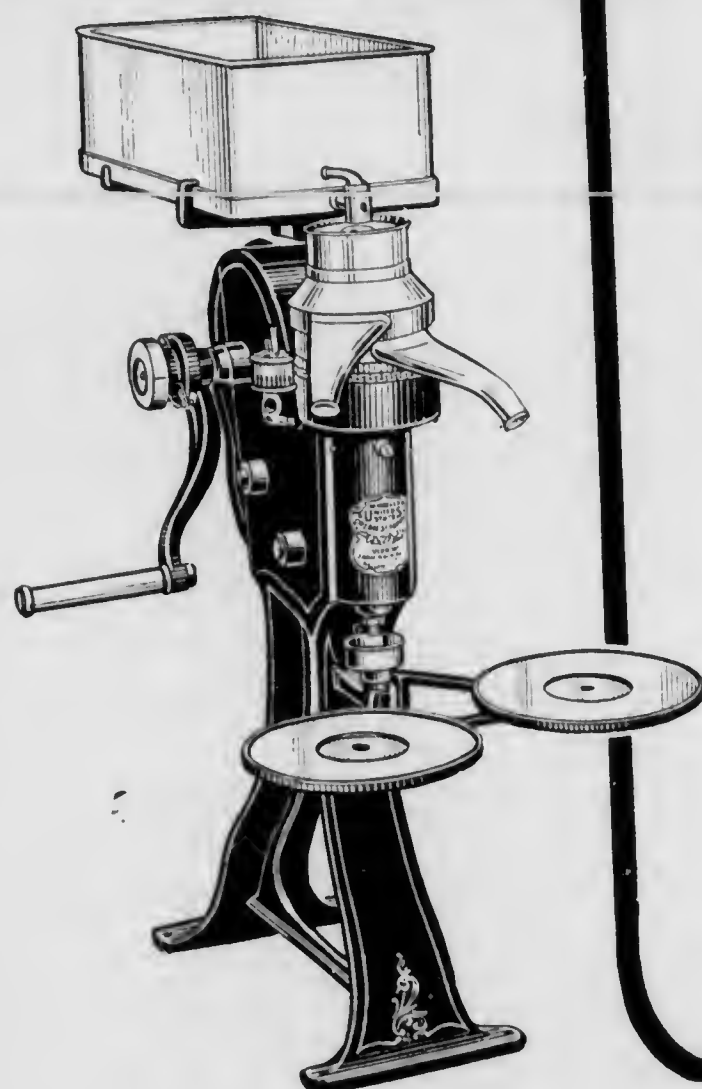
THE SHARPLES SEPARATOR CO.
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Skims clean at any speed

UNITED STATES CREAM SEPARATOR WITH PERFECTED DISC BOWL



COMPARE Then Buy

Play safe. Compare several of the leading makes of cream separators, point for point—before you act. Any dairyman can choose right if he follows this plan. The danger comes in accepting claims which do not "square up" with performance.

If you start in to seriously consider comparisons, here are some of the commanding features that you'll quickly note about the United States—the separator that holds and sustains the world's record for close separation:

- 1—Perfect Disc Bowl a marvel of close skimming, easy cleaning and assembling.
- 2—Crank or power can be attached on either side.
- 3—Fewer revolutions of crank make turning easy.
- 4—The only practical and reliable Bell Speed Indicator.

Be your own judge and jury—you are the one who pays. We'll be glad to send you all of our booklets; write

Vermont Farm Machine Corporation
BELLWIS FALLS, VT.

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Ore.

THE "WHY" OF THE DAIRY COW

Some few dairy farmers engage in this business for pleasure—usually they are of the class of gentlemen farmers who can afford, if conditions demand it, to operate at a monetary loss—particularly if some special breeding lines are aimed at or something special in production records is to be obtained.

The very large majority of the dairy farmers engage in this business with an object of obtaining a living and are entitled to a profit on their investment and labor. In these days of strenuous conditions, both from the standpoint of capital and labor it is of the utmost importance that the dairy farmer definitely knows whether he is operating at a profit or a loss. The dairy cows, the actual producers, should unquestionably keep the dairyman—not the dairyman the cows.

Dairy farmers are prone to postpone any action regarding changes or investigations of their herds, both as to grade and pure bred cattle. Some are afraid to face the shortcomings of many of the cows in their herds—frequently acknowledging that all was not well and their herds should be cleaned up.

The boarder cow in any herd eats up the profit that should go to the dairyman. Find out which are the boarders in your herd and eliminate them. Don't put it off until some other time because, if you do, you are pyramiding your losses.

There are good grade cows as well as poor ones. Poor pure breeds as well as good ones. Just because a cow is registered, doesn't mean that she is a profitable one in your herd. Just because your herd sire is a pure bred does not mean that his get will be high producers both from the milk and butter fat standpoint.

The whole milk producing problem is one of considerable study. Breeders in all classes of cattle aim for the highest standard. The lineage of the sire and

dam are carefully searched and cows are bred for the best result. The days of the old "hit or miss" breeding are gone. Dairyman should breed with a definite object in view, carefully and consistently.

Dairy farmers who are postponing the investigation of their herds, from the standpoint of milk production and butter fat and who neglect the ordinary care in preparing and handling milk intended for human consumption, are making a big mistake, which will ultimately prove to be a burden on their pocket books.

Investigations of the productive capacity of each cow in your herd should begin at once. If you do not have a cow testing association in your vicinity, get in touch with your county agent and see if one cannot be formed. If this is not possible why not have a community testing outfit. The expense is not heavy and some bright farmer's son can readily learn to operate a Babcock testing machine. If you would weigh, test, and keep a record of each cow's milk, it would surprise you just how quickly you would get a line on what your cows are doing. It will be easy to draw a line between the profit makers and those who do not pay for their keep.

If the milk be properly sampled, tested and recorded, it will give you a better idea as to the value of your milk itself.

You may say, look at the added expense—look at the time it takes to do all this work, or "it's too much trouble." "I went along pretty good before and I guess I'll keep on the same old way." But will you?

The public is being educated. It pays the price demanded for its milk supply. In return however it wants a real milk product. What chance for existence in business has a dealer who puts 3.25% butter fat milk on the market. He is within the legal butter fat content as provided by the Pennsylvania Board of Health regulations, but his competitor is putting milk with 3.60% to 3.80% butter fat on the market at the same price. How long can the dealer putting the lower grade milk on the market last?

Clearly it is up to the producer to make a grade of milk that will be marketable. In quite a few cases recently, low grade dairies have been dropped and it's becoming more and more difficult to find buyers for low test milk.

With consumers more and more insistent for good, clean milk, dealers are becoming more particular as to the quality of milk being delivered by the producer. Some dealers are making drives on the production of higher than ordinary market grades. Others are becoming insistent that more sanitary conditions prevail—not only as far as the cows themselves are concerned, but also in connection with sanitary arrangements in the milking and handling. A few go even further and are beginning to insist on veterinary examinations of the health of the cows.

Straws indicate the direction in which the wind blows. Look into your herd, make it a profitable one, producing good, clean milk and you will show a profit on the right side of the ledger and have a herd that you will be proud of.

It is said that cows hate motor cars—but many beautiful calves may be seen getting in and out of them.

SILAGE FOR YOUNG STOCK

By A. L. Haecker

Several years ago a breeder called my attention to the value of corn silage for the rearing and developing of young stock. Having two farms, one equipped with silos and the other not, he had an opportunity to see the advantage of silage for this purpose. I was greatly surprised to note the difference in size and quality of the young stock that were liberally fed corn silage with alfalfa hay. They were not only larger, but were in better condition. This convinced me that the silo should be used more for this purpose, and I have since that time often found examples to prove the value of silage for young growing animals. The breeder of pure bred stock, whether dairy or beef cattle, has much need for silage in the economic development of his herd. The cost of the product, whether beef or milk, is the principal item of expense for the breeder to consider and in this age of high priced hay and grain, the cost of the ration becomes the most important item and the one on which depends the profit for the breeder.

Any man who keeps ten head or more of cattle will find a silo an economic equipment on his farm. It is necessary for nine-tenths of our milk and cream producers to grow and develop their young stock and the silage which furnishes the succulent ration to the milk cows will also form the best kind of ration for the young stock.

Liberal feeding is the only profitable kind for there is no money in half-feeding stock. An animal must be boarded and if only a boarding ration be given there is no profit but really a loss. It is that part of the ration which is over and above the food of maintenance, or board, from which we derive our profit. On this basis, an animal will earn money in proportion to the amount of food she consumes, and this is largely true. Good feeding is supplying animals with their required nutriment at the lowest possible cost. Any one with plenty of money can feed an animal well, but to feel an animal well and economically requires a knowledge of the subject. The two great food elements which are necessary are known as carbo-hydrates and protein. Corn silage is our cheapest form of carbo-hydrate and clovers, or the legumes, furnish our protein, in the cheapest forms. Young stock, from the time they are weaned, will make a splendid growth and development on corn silage and clover or alfalfa hay without any grain, and this ration is a cheap one and within the reach of practically every breeder.

The silo will prove of great economy not only in the growing and developing of young stock, but also the growing of colts or maintenance of idle horses. Silage has been likened to pasture and it is very properly considered from this viewpoint when used for the growing and developing of all our live stock.

Top dressing the winter grain crops, such as wheat and rye is highly advisable. Manure thus applied protects the crop from winter injury as well as adds to its plant food. For best results on winter grain the top dressing must be light enough to avoid all danger of smothering, nor should enough manure be applied to induce an overgrowth of straw and consequent lodging of the grain in the spring. Incidentally, if grass has been sown with the grain, a light top dressing is one of the best methods of insuring a "catch."

Did you see this?

From The Dairyman's League News, Sept. 25.



WRITE—TELEPHONE—OR MAIL YOUR ORDER

Separator will be shipped same day your order reaches us—express or freight, as you order—from stock in our warehouse in New York. If you desire more information before buying—see pages 73 to 78 of our new catalog. If you have no catalog, copy will be promptly mailed upon receipt of request.

98 Chambers Street, N. Y. City
National Farm Equipment Co.
98 Chambers Street, N. Y. City



in charge for the last half.

Buy a Separator

The Dairyman's League recommends to every member that either he as an individual or in cooperation with neighbors purchase a cream separator. The large separator manufacturing companies have a supply on hand large enough to take care of thousands of our members. As the situation stands now, those members of the Dairyman's League whose milk is being sold to such companies as Nestle's Food Company, Borden's Condensed Milk Company, the Mohawk Condensed Milk Company, the Phoenix Cheese Company and many other manufacturers of dairy products, are likely to have no outlet for their milk from October first. In case this happens, the only possible thing that can be done is to make it up at home. This will require a separator.

Aside from the immediate situation, the policy of having at least a few first class separators of some size in every dairy community is good insurance for it always assures dairymen at least some kind of a market in case the regular one fails.

Know a Dairyman by the Button He Wears.

At the time every dairyman signs the cooperative contract he will be wearing a button with the Dairyman's League logo on it.

SEVEN GOOD REASONS Why YOU Should Buy a PREMIER CREAM SEPARATOR

- 1 The improved self-balancing bowl, with perfected milk distributor is the "last word" in close skimming, easy cleaning and assembling.
- 2 Bell speed indicator insures correct speed—consequently perfect work.
- 3 Strong, rigid, handsome—built to stand up under daily hard service.
- 4 Guaranteed for five years.
- 5 All guess taken out of the purchase—sold on 30 days' trial—your money back if after 30 days' use you are not entirely satisfied.
- 6 So low priced that the investment is very small—so small that you cannot afford to be without a Premier, for use in any emergency—even if you sell most of your milk.
- 7 Easy payments if desired—let the Premier pay for itself from the sale of cream and butter.

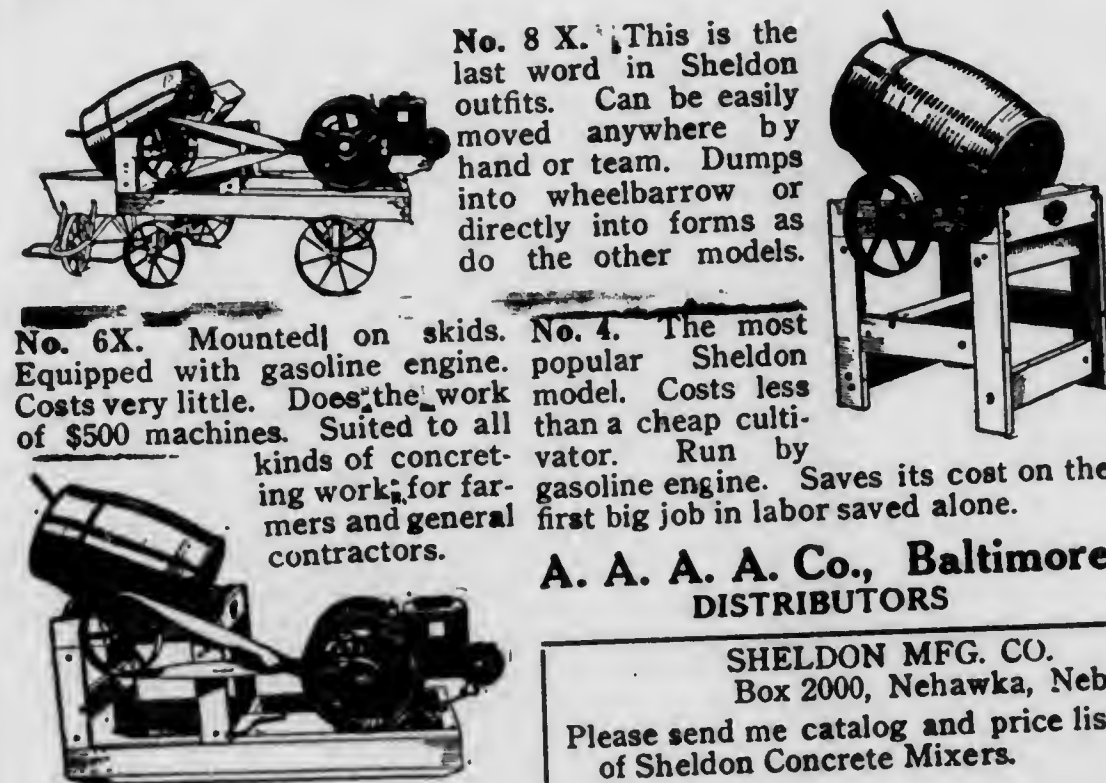
CAPACITIES and PRICES

No. A-30—Cap. 300 lbs. per hour—Cash price, \$49.25
Time payment price, \$5.00 down; \$5.00 a month for 10 months.
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Time payment price, \$6.00 down; \$5.50 a month for 10 months.
No. A-70—Cap. 700 lbs. per hour—Cash price, \$64.35
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No. 4. The most popular Sheldon model. Costs less than a cheap cultivator. Run by gasoline engine. Saves its cost on the first big job in labor saved alone.

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Manufacturers
Heaters, Ranges, Stoves, Etc.

THE FAIR PRICE OF MILK—Continued from page 8

		OIL MEAL—(Ton)		Actual (*)									
		1913	1914	1915	1916	1917	1918	1919	1920			1913	1914
January	.....	39.00	35.25	52.00	63.00	72.00	88.00	88.00	88.00			27.50	31.00
April	.....	41.00	35.25	56.00	66.00	79.00	85.00	85.00	85.00			27.50	31.00
July	.....	41.00	35.25	50.00	59.50	88.00	85.00	85.00	85.00			28.00	31.00
October	.....	41.00	35.00	64.00	52.00	95.00	.....	.....	.....			30.00	31.00
Yearly Average	.....	40.50	32.69	58.00	62.625	83.50	86.00	86.00	86.00			28.25	31.00
% Inc. over 1915	.....	19	43	64	106	112	.....	.....	.....			9	53
		16% DAIRY FEED—(Ton)		Actual (*)									
		1913	1914	1915	1916	1917	1918	1919	1920			1913	1914
January	.....	27.50	31.00	40.00	54.00	61.50	70.00	70.00	70.00			33.00	36.00
April	.....	27.50	31.00	43.00	54.00	66.50	72.00	72.00	72.00			34.00	36.00
July	.....	28.00	31.00	43.00	53.00	68.50	76.00	76.00	76.00			35.00	36.00
October	.....	30.00	31.00	48.00	53.00	64.00	.....	.....	.....			36.00	36.00
Yearly Average	.....	28.25	31.00	43.50	53.50	60.125	72.67	72.67	72.67			36.00	36.50
% Inc. over 1915	.....	9	53	89	113	157	.....	.....	.....			1	46
		UNICORN 28% DAIRY FEEDS—(Ton)		Actual (*)									
		1913	1914	1915	1916	1917	1918	1919	1920				
January	.....	33.00	36.00	44.50	.....	70.00	80.00	80.00	80.00			36.00	38.00
April	.....	34.00	36.00	50.00	.....	74.00	81.00	81.00	81.00			36.00	38.00
July	.....	35.00	36.00	58.00	.....	76.00	85.00	85.00	85.00			36.00	38.00
October	.....	36.00	38.00	59.00	.....	78.00	.....	.....	.....			36.00	38.00
Yearly Average	.....	36.00	36.50	52.875	.....	74.50	82.00	82.00	82.00			36.00	36.50
% Inc. over 1915	.....	1	46	.....	.....	106	127	127	127			.....	.....

(*) This per cent. average and increase is over 1915 instead of 1913.

PRICE OF MILK TO PRODUCERS—1913-1920

Below is the price the producer has received by months from 1913 to August, 1920, with the per cent. increase in the annual average for each year over 1913:

		1913	1914	1915	1916	1917	1918	1919	1920
January	.....	\$2.20	\$2.20	\$2.20	\$2.32	\$3.48	\$4.41	\$4.59	\$4.59
February	.....	2.20	2.20	2.20	2.32	3.48	3.71	4.53	4.53
March	.....	1.86	1.86	1.97	1.97	2.32	3.48	3.71	4.41
April	.....	1.86	1.86	1.86	1.86	2.67	3.48	3.71	4.30
May	.....	1.86	1.86	1.86	1.86	2.67	3.48	3.48	4.30
June	.....	1.86	1.86	1.86	1.86	2.67	3.48	3.48	4.30
July	.....	1.86	1.86	1.86	1.86	2.90	3.48	3.48	4.41
August	.....	2.09	2.20	2.20	2.20	3.25	3.48	3.48	4.41
September	.....	2.32	2.32	2.32	2.44	3.25	4.64	4.41	.....
October	.....	2.32	2.32	2.32	2.44	3.36	4.76	4.64	.....
November	.....	2.32	2.32	2.32	2.44	3.48	4.76	4.64	.....
December	.....	2.32	2.32	2.32	2.44	3.48	4.76	4.64	.....
Yearly Average	.....	2.08	2.09	2.11	2.13	2.90	3.88	4.10	4.45
% Inc. over 1913	.....	.....	.04	.09	.....	35	86	97	123

(1) This is for the first eight months only and includes the months of lower prices.

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS

CLEANLINESS AN ASSET IN THE MILK MARKET

Farmers who produce clean milk possess a business asset the value of which many do not fully appreciate. The public is better informed, by far, than it was a few years ago regarding the value of pure milk as a food. It knows more of the dangers of unclean milk. Therefore, as a business proposition as well as from a sense of duty, every farmer owning cows should see to it that the output is wholesome.

Clean milk benefits not only the consumer but the milk producer as well. Most producers of market milk have experienced the chagrin of having a shipment of milk refused or returned because it reached the market sour, tainted or otherwise in poor condition. Although such milk may be used for feeding pigs, it usually is a complete loss to the producer since the cost of transportation back to the farm usually exceeds its value.

Frequently, also the producer depends on a certain market as an outlet for his milk and has no means for utilizing small quantities at uncertain intervals, even if he had it at the farm. Another important consideration is the unpleasant effect which the receipt of sour, tainted, or otherwise unsalable milk has upon the purchaser. Delivering milk of that kind usually results in the loss of the confidence of the dealer, or, if it is delivered directly to the consumer, the loss of customers.

Clean milk means fewer complaints, a better class of patrons, and a steady market for the product. Carelessly produced and improperly handled milk may be the means of spreading disease. Every owner of a dairy herd should consider it his duty to himself and to the community to keep only healthy cows, supply them with wholesome feed, and keep them in clean, comfortable quarters. The milkers and all who handle milk should realize that they have in their charge a food which is easily contaminated and should take every reasonable precaution to keep it clean.

A BUSHEL OF CORN

The laws of most of the States recognize 70 pounds of ears or 56 pounds of shelled corn as a bushel of corn. These weights are reliable, says the United States Department of Agriculture, when the ears or shelled corn contain only 15 per cent. of water. About one-third the weight of ear corn as customarily harvested in the Northern States is water, while that harvested in the drier sections of the South contains less than 15 per cent. of water.

DO YOU KNOW

That the herd sire determines the ability of his daughters to turn feed into milk?

That the improvement in your herd during the future years will depend on the herd sire used?

That weeding out the boarders will not increase the production of those cows left?

That proven bulls are the only ones to insure herd improvement?

That proven bulls are not in the market?

That bull associations allow you to keep a bull in the community until his ability to produce daughters of good production is known?



Keep Farm Animals Healthy

—full of life and vigor.
International Stock Food Tonic helps them to properly digest and assimilate their food. Keeps their blood pure—helps them to avoid disease. The feed saved more than pays for it.

INTERNATIONAL Stock and Veterinary Preparations

—include International Stock Food Tonic, Hog Tonic, Worm Powder, Animal Dip, Phenol (Disinfectant), Calf Medicine, Heave Powder, Distemper Powder, Gall Salve, Poultry Preparations, Silver Pine Healing Oil and many others.

Successful for 30 Years

A steadily increasing demand for over a quarter of a century proves their popularity. There's an International preparation for every farm animal.

Ask Your Dealer

For Barrenness in Cows, Mares and Sows Use Hood Farm Breeding Powder

Astonishing Success in making Barren Animals Breed—Indispensable After Abortion—Invaluable Where Cows do not clean—Profitable to use on Every Cow after Calving.

Read what others say:
Hood Farm Breeding Powder is great and has been a God-send to me. I cannot be without it.

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I have been using your breeding Powder for eight years, when needed, and am well pleased with it.

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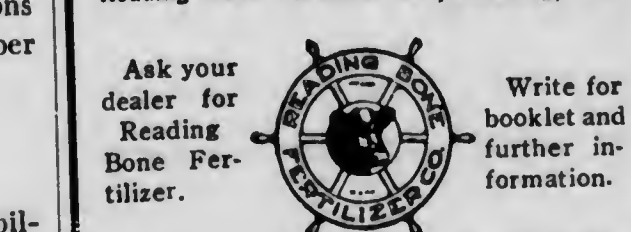
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Quality Service Satisfaction
Feeding the World: The American farmer's job. To do your utmost the land should be fed too. Stick to the old dependable when it comes to feeding the land—Reading Bone Fertilizer.

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Reading Bone Fertilizer Co., Reading, Pa.



Ask your dealer for Reading Bone Fertilizer.

Write for booklet and further information.

UNREASONABLE

When Theodore Roosevelt was Governor of New York he knew quite well a farmer who lived at a house on the road where the Governor, riding horseback, would always stop for a rest.

One day when the Governor rode up the farmer was reading a New York paper.

"Governor," he asked, "aren't these New York papers pretty tall liars?"

"Why, what makes you think they are?"

"Well, here is a story I was just

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HEAD YOUR HERD WITH ONE OF THESE SIRE

FINANCIAL MABEL'S KING 177196

A young bull, born August 16th, 1919, and nearly ready for service. Solid color. He is a son of Sans Alois's King 146291, one of the great show bulls of the family, and a daughter of Financial Mabel's Queen 107120, a double granddaughter of Financial King's Eminent 94592. She has just finished her junior two year record of 486.53 pounds of butter. This calf is intensively Financial King bred and a very typy individual. He is priced at \$300, delivered to you.

FINANCIAL MARC LAD 178176

A show calf, dropped August 8th, 1919, and about ready for service. Solid color. Sired by Sans Alois's King 146291, a great show bull of recent years, and is out of King's Marcia A 357904, a daughter of Financial King's Eminent 94592 and out of Eminent Marcia F 35764. His dam has just made an AA record of 438.51 pounds of butter in 324 days as a junior three year old. This is a mighty good line-bred Financial King bull calf, fit to show this fall, and he is priced at \$250, delivered to your farm.

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Financial Kings

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a-readin' of a man who paid \$14,000

for a picture of a cow. I don't believe it."

"Why not?" said T. R.

"Because," said the farmer, "I don't

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would pay \$14,000 for anything he

couldn't milk."—Houston Post.

NOV. 11, 1920

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sale of

W. H. Hicks' Herd

consisting of

80 Head

**Pure Bred Holstein-Friesian
Cattle**

when we will offer some of the strongest producing and transmitting lines of the King Segis breeding. Consisting of 20 daughters of the 33 lb. bull, King Segis Champion Kay, who is sired by King Model the \$10,000 bull. 25 granddaughters of Sir Inka Prilly Segis, who has over 85 daughters in the great Winterthur Farms Herd.

SALE AT 10.30 A. M.

INSURANCE AGAINST MILK LOSS

DAIRYMEN who market whole milk occasionally encounter difficulties in disposing of their product.

Shut-downs, accidents and storms often occur, and without notice the dairy farmer may have an accumulation of milk on hand.

Conditions are also constantly changing, and it is sometimes advantageous to market cream or butter which will keep longer and ship to better advantage.

Under any of these circumstances, a De Laval Cream Separator quickly and easily separates the cream and makes possible the sale of the butterfat, which is the highest priced element and least subject to spoilage either in storage or in shipment.

Unlike many other forms of insurance, the first cost of a De Laval is the only cost. It is always ready for immediate use and is the cheapest and safest way for the dairy farmer to insure himself, either against occasional difficulties or changing market conditions.

Like other forms of insurance, a De Laval should be provided before the accidents or changing conditions occur.

The nearest De Laval agent will be glad to demonstrate a De Laval. If you do not know his name, write to nearest De Laval office.

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INTER-STATE Milk Producers Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE INTER-STATE MILK PRODUCERS ASSOCIATION, Inc.

VOLUME I

WEST CHESTER, PA., AND PHILADELPHIA, PA., NOVEMBER, 1920

NUMBER 7

OCTOBER MILK CONDITIONS PHILADELPHIA SURPLUS PLAN

Condensary Situation Still Acute

By H. D. ALLEBACH

Weather conditions during the month have been unusually favorable for milk production. We have had no killing frosts and pasture has been exceptionally good for the time of the year in most of the dairy sections of this territory. Under these circumstances we have had a continuous, heavy flow of milk throughout the month. In the fluid milk market the supply has been pretty well absorbed and prices have been maintained. The supply on the respective milk platforms in Philadelphia, has been fairly equal to the demand, at times there was a surplus which moved freely at slight price concessions. As a rule, however, prices have been pretty well maintained. Prices paid for fluid milk have been maintained at 10 cents per quart, f. o. b. Philadelphia, or \$4.01 at receiving stations in the 50 mile zone, for 4 per cent. butterfat milk. All milk is to be paid for on the basic quantity basis, the October, November and December quantity being taken, on an average, as the quantity on which the basic quantity price is to be paid in 1921.

From the fluid milk standpoint the market has been fairly good and it is expected that the same prices will be maintained for the month of November. The market, however, is being constantly threatened by the unsatisfactory conditions in the condensed milk market.

Manufactures of condensed and powdered milk products are still confronted by most unfavorable conditions. There has been no demand for manufactured goods, stocks continue heavy, and, even at price concessions, goods cannot be moved. Wholesale buyers, in the face of the continued agitation for lower food prices, are not disposed to stock any quantity of condensed products. They hope for lower prices and play a waiting game, buying on a from hand to mouth basis. This is a very slow method in reducing stocks.

Manufacturers, to save themselves, have largely discontinued making condensed or powdered products. Many plants in different sections of the country have been closed down, others have gone into the manufacture of butter. To

compete in the butter market, lower prices for milk were necessary. In a number of cases manufacturers and farmers have co-operated, with a view of maintaining a market for the milk and enabling the manufacturers to keep their organizations intact and plants in operation.

These conditions were held to be but temporary and as soon as the customary decrease in the milk flow arrived, due to frosts and approaching winter con-

The details of the Philadelphia Surplus Plan were worked out by a committee composed of representatives of the farmers and the dealers. After the plan had been adopted there still remained numerous details which had to be arranged by Co-operative work, both on the part of the dealers and the farmers.

We feel that, in the long run, the plan has been a good one. Taking it on the average over the year, nobody has lost any money. Many have gained. Some

March, \$3.61; April, \$3.61; May, \$3.61; June, \$3.61; July, \$3.61; August, \$4.07; September, \$4.01.

Making an average of \$3.70 per cwt. If the farmer produced milk on a basis of 70 per cent. basic and 30 per cent. surplus and this represents probably the largest percentage of producers, the weighted average price per hundred for the nine months of the year was \$3.49.

If another farmer produced no milk in the basic months of the year, October, November, December, 1919, he was by agreement placed on a fifty fifty basis. At that basis the weighted average for the nine months of the year was \$3.35 per cwt.

The price paid for milk, all basic quantity, during 1919 was as follows:

January, \$3.84; February, \$3.84; March, \$3.38; April, \$3.15; May, \$3.15; June, \$3.15; July, \$3.15; August, \$3.61; September, \$3.61; October, \$3.61; November, \$3.61; December, \$3.61.

An average of \$3.47 for the twelve months.

These figures are all based on 4 per cent. butterfat milk at receiving stations in the fifty mile zone.

If we are able to hold the present price of \$4.01 per cwt. during October, November, December, this year, all of which are full basic months, the average price for basic

milk for the year 1920 would be \$3.78 per cwt., as compared to \$3.47 for the year 1919.

On a weighted average basis this would bring the price of 70/30 milk to \$3.54 per cwt. and 50/50 milk to \$3.39 per cwt.

All weighted average prices as calculated above are slightly below the actual price paid, under the plan, as an increase of 10 per cent. was allowed on rated basic quantities in May, June and July and 5 per cent. in August. In other words the surplus milk was smaller, by agreement, the percentages named in the various months as stated.

The Philadelphia Surplus Plan has only been in operation for one year. Whether by trying to equalize production and taking October, November and

few, who produced only summer milk, that is shipped no milk at all in the fall of 1919, on which a basic quantity could be established, may have been a little behind, but we are not ready to say that they lost anything, because, without the plan, the price of basic milk would not have been as high as it was.

The surplus price at all receiving stations in this territory during the nine months of the year, when the surplus price was effective, was as follows:

January, \$3.12; February, \$3.18; March, \$3.19; April, \$3.43; May, \$3.00; June, \$2.76; July, \$2.76; August, \$2.64; September, \$2.81.

This makes an average for the nine months of \$2.99 per cwt.

The price of basic milk for the same period was as follows:

January, \$3.61; February, \$3.61;

Cedarlaun Canary Paul, Champion, Senior Champion, and Grand Champion Holstein Bull. National Dairy Show, 1920



(Continued on page seven)

(Continued on page seven)

NATIONAL DAIRY SHOW THE BEST EVER

"Bigger and Better than Ever," expresses the consensus of opinion in connection with the 1920 National Dairy Show, held in Chicago last month. This great show which was housed in the International Amphitheatre, at the Union Stock Yards, embraced one of the greatest exhibits of dairy cattle, educational exhibits, industrial machinery and equipment ever presented.

Officials who have been connected with the National Dairy Show for fourteen years, state, that never before has there been a showing of dairy machinery and equipment which approached the completeness of the recent show.

The cattle section held a noteworthy exhibit of pure bred cattle—Holsteins, Guernseys, Jerseys, Ayrshires and Brown Swiss. Over a thousand animals were shown, entered from almost all of the important dairy states of the country. The number of breeders represented far exceeded all previous years. In the Holstein class, 79 herds were represented, while 54 breeders of Guernseys had entries in the show.

Almost every manufacturer of machinery having to do with the dairy industry was represented. Particularly large was the showing of machinery and appliances used in connection with the care, handling and preparation of fluid milk for the market.

An exceptionally large exhibition and demonstration of milking machines and cream separators was to be noted, as well as other appliances interesting to the dairyman.

Attracting wide attention were the exhibits of butter, cheese and other milk products. Exhibits from Denmark, Holland, Argentine and Uruguay, showed butter, cheese and other milk products. The American industry in these lines was also ably represented.

The United States Government exhibit and child welfare sections furnished, through lectures, motion pictures, charts, tests and demonstrations, data and information in connection with the value of milk as a food and the pure bred cow as a producer. The Dairy Division's Holstein Demonstration Herd was on show and lectures were delivered daily by experts, using this herd to demonstrate their subject.

Of equally great interest was the activities of the Boys' and Girls' Calf Clubs. In the State contests, fifteen States were represented. Missouri carried off the honors, her team winning the trophy for all breeds. Arthur Gwin, of Missouri, was high individual for all breeds. His team mate, Arthur Bennett, was second with Clarence Downs, of Illinois, third. Illinois was second and Texas third in the team contests for all breeds. In the agricultural students judging contests the Kansas State Agricultural College was high for all breeds, with Iowa State College second and the University of Kentucky third. C. H. Young, of Kansas, was high individual for all breeds; Donald C. Badger, of Indiana, second, and W. Harold Davis, of Pennsylvania, third.

The great show ring was the daily scene of judging and contests for supremacy in all classes and breeds was sharp. Cedar Lawn Canary Paul 118333, owned by Baird Bros., Waukesha,

Wisconsin, illustrated on the front page of this issue, received the first premium for Holstein bulls in his class. He also won the senior champion and grand champion prizes for Holstein bulls. He was born January 14, 1913, sire, Canary Paul 46323; dam, Nellie Alcestra Rice 100005. At the time of the show he weighed 2685 pounds. The grand champion Guernsey bull, was Imp. Itchen May King 25174, calved May 29, 1912; sire, Imp. Itchen Red Raider 2042; dam, Imp. Verbenia 5501, and was entered by F. E. Fox and G. Kingston & Sons, Waukesha, Wis.

During the period of the show many meetings of associations identified with the dairy industry were held. The National Milk Producers Federation held a two-day session at the Morrison Hotel. State breeders associations, organizations identified with the distribution of milk



State Holstein Herds in the Show Ring, National Dairy Show, Chicago, 1920

and other branches of the industry held important meetings. In fact the show was the center of attraction for all interested in dairying and its allied branches from the smallest producer of milk and breeder to the largest organized interests identified with the trade.

On Wednesday evening, October 13th, a combined banquet under the auspices of the different dairy organizations, was held at the La Salle Hotel, which was largely attended. Among the speakers were W. N. Mann, president of the National Dairy Council; M. T. Aitken, president of the Holstein Friesian Assn; Milo D. Campbell, president National Milk Producers Federation and others prominent in the dairy field.

The Connecticut Milk Producers Association, Inc., with headquarters at Hartford, Conn., issues a monthly bulletin under the title C. M. P. A. Bulletin, which gives to its members a concise review of the local milk market each month. The general business conditions are also touched upon as well as the milk situation in the adjoining territories of New York and New England.

The greater efforts being made by the various milk producers organizations to keep their members fully posted is a move in the right direction.

MILK PRICES AND THEIR EFFECT ON PRODUCTION

The long expected period of readjustment from war time prices of many commodities appears to be under way. Those engaged in the dairy industry as well as industrial and other pursuits are confronted by a condition, not a theory.

A grave problem is to be solved. Lower prices for many food products as well as raw products of the farm are in effect, although the ultimate consumer—and that includes the farmer—has not yet been materially benefited.

Prices of some commodities, notably sugar, coffee, flour, some classes of clothing, certain automobiles, etc., have declined. We may have benefitted slightly by some of the reduced commodity prices—the automobiles we may have to do without.

Whether these prices are temporary or will strike a permanent level yet remains to be seen. As propaganda they

Many buyers of milk for manufacturing purposes have withdrawn from the market. Stocks of condensed, evaporated and powdered milk have accumulated and there is almost a total lack of demand. There is practically no buying for export. Domestic buyers are purchasing from hand to mouth. Much of the condensed milk on hand was manufactured at high sugar prices. Many condensing plants are still under contract to take sugar at high prices, in instances 22 cents a pound and better, even though present sugar prices are in the neighborhood of 11 cents wholesale. Without a doubt, manufacturers have been hard hit, but must the entire milk industry suffer for their misfortune.

In some districts, manufacturing plants have been closed, leaving the farmer without a market for his product. Others, hoping that the difficulty would only be a temporary one, have been taking in milk and making butter and cheese for the farmer's account, others again take in milk, process it, or sell it, one way or another and give the farmer what they can get out of it—surely an undesirable business proposition for the farmer.

That these methods are unsatisfactory must be admitted—but they were adopted, in various sections, in the hope that they would tide over a difficult period. The whole volume of milk going into condensed, evaporated and powdered products is estimated at close to 5 per cent. of the total milk production, and while this itself should not affect the situation, the tremendous stocks on hand are the burden which over-shadow the market.

If lower prices are to attain, particularly in districts where milk is processed to any extent, the effect of the situation must necessarily reflect on prices in other districts, particularly for whole milk marketed in the larger cities.

Should a decline in prices paid producers be forced, particularly at this season of the year, without a corresponding decline in the price of labor, and even the farmer's wife and children who engage in the work of dairying have the same relative money earning capacity as the hired help, and must be considered in computing costs; without a marked decline in the prices of dairy feeds and dairy supplies, the farmer faces a sharp decline in return for his milk product.

How Can the Farmer Adjust Himself to Such Changed Conditions?

But one way remains for the farmer, under these conditions, to adjust himself to the situation and break even. During the war he was implored to maintain his herd at the top notch. While a cow might not be a profitable producer, he was urged to keep her in his herd, with a view of making production, notwithstanding cost and to do this from a patriotic standpoint. Higher prices were to aid him in offsetting this loss to some extent, and he did his duty.

Now with a readjustment downward a new problem presents itself. Must the farmer go on taking his loss? Unless he takes sharp measures and does so promptly he will face a heavy loss. How can the farmer protect himself. He

(Continued on page ten)

DANISH FEEDING FOR PRODUCTION

Methods of the Danes in Feeding for High Yields

By R. W. Balderston

The methods of the Danes in the production of milk are highly interesting to dairymen in the United States, in that we see constantly growing importations of Danish butter which is a source of anxiety to some and wonderment to others, how Danish dairymen can produce butter and therefore the natural raw material, milk, cheaply enough to compete with the American product. Many factors enter into this problem. One of the chief of which is, probably, the methods of production, particularly in connection with the feeding of the cows so as to obtain a maximum production at the lowest cost.

The Danish cows have large digestive capacity and are kept all summer almost solely on pasture. This is no "hit or miss" arrangement like on many American farms when the cows are expected to live well and give lots of milk when turned out on a piece of undrained swamp or stony hill top, worthless for anything else.

Danish permanent pastures are as heavily fertilized as any other part of the farm, and special pasture grasses are seeded to furnish a maximum of feed, especially early in the season before the cattle are turned on the aftermath of the hay fields.



Cows tethered in alfalfa and clover pasture. Field peas for grain in foreground. Note absence of fences.

Note the peculiar feature of the Danish pasture practice, as shown in the accompanying illustration. All the cows are tethered to iron pins, by a chain, approximately 15 feet long. These pins are driven into the ground at equal distant points, on a line across the field, so that the cows can eat all the grass and yet not get tangled up in the chains. The grass is allowed to get knee high before the cattle are pastured on it. Being confined to a restricted circle each cow eats her assignment all down without any waste. The claim is made that by this practice the cows eat more and that more feed per acre is produced.

The cows are watered from a tank wagon. The pins are moved forward into fresh grass three times a day. Many farmers do not bring their cows to the barn, even for milking, but take the cans and strainers to the field, often milking three times a day. This is the usual practice be the herds large or small. In one field was counted a herd of 200 cows.

By this practice all necessity of fencing is eliminated. All the young animals, calves and all, are tethered on the ground just passed over by the milking cows, to get the less palatable portion that the

(Continued on page nine)

MEETING OF DAIRYMEN AT SALISBURY, NOV. 10, 1920

In connection with the annual meeting of the Maryland Agricultural Society, held at Salisbury, Maryland, there will be a meeting of the dairymen on Wednesday, November 10th, for the purpose of discussing the handling of surpluses, the erection of surplus plants, etc., to be discussed by D. L. James, formerly of the Bureau of Markets and now manager of the Fall River Milk Producers Corporation. Mr. James has had quite a wide experience in the handling, management and marketing of dairy products at the present time is right on the firing line.

There is a move also on foot for the establishment of a central laboratory on the Eastern Shore to take over the testing of all milk produced in that section.

questions of testing have caused a great deal of ill feeling between these two forces.

In Baltimore each dealer pays 20 cents per sample or 40 cents per month per producer for this testing service furnished by an outside commercial agency under the direction of the laboratory board.

Invitations have been extended to the different dairymen's units in that section to send representatives, to county agents, and to dealers and creamery owners operating in this territory, to be present and assist in the perfecting of this plan which seems to be sound and meets the approval of all concerned in the sections where it is in operation.

J. A. Gamble,
Professor of Dairy Husbandry,
University of Maryland.

ANNUAL MEETING

OF THE STOCKHOLDERS

Inter-State Milk Producers' Assn.

READ ADVERTISEMENT PAGE 8

ANNUAL BANQUET YOU DON'T WANT TO MISS IT

READ ADVERTISEMENT PAGE 8

HOTEL RESERVATIONS AND BANQUET
TICKETS CAN BE HAD ON APPLICATION
TO THE SECRETARY.

NOTE THE DATES

December 6th and 7th

Banquet, December 6th, 6.30 P. M.

Adelphia Hotel, 13th and Chestnut Sts., Philadelphia

MAKE YOUR PLANS TO ATTEND

LOOK OVER THE PROGRAM, IT'S A GOOD ONE

It is planned to establish a laboratory similar to that covering the Baltimore supply.

The Baltimore laboratory is operated under a laboratory board consisting of three members, one appointed by the dealers and creamery owners, the second by the producers and these two choosing a third. The control of the laboratory is vested in this board.

A twenty-four hours' production from each producer is sampled twice each month and the average of these two samples is reported to the dealer or creamery purchasing the same and the price per hundred weight or per gallon received by the producer is based upon this average test established by the outside laboratory. By taking the testing of milk out of the hands of the producer and of the dealer, better feeling between these two results, for as everyone knows,

CUMBERLAND COUNTY (PA.) COW TESTING ASSOCIATION

The report of the Cumberland County Cow Testing Association for September, 1920, is summarized as follows:

Number of herds tested.....	24
Cows milking	291
Cows dry	56
Profitable cows sold	2
Unprofitable cows sold	4
Cows producing over 40 lbs. fat....	18
Cows producing over 50 lbs. fat....	3
Cows producing over 1000 lbs. milk 31	
Cows producing over 1200 lbs. milk 19	
Highest butterfat record for mo. 53 lbs.	
Highest milk record for mo. 1656 lbs.	

Both these latter records were made by a cow owned by J. L. Baschore, Mechanicsburg, R. D., 5.

Paul L. Edinger,
County Agent.

CHESTER COUNTY FARM BUREAU MEETING

The regular monthly meeting of the farm bureau executive committee was held in the office, Tuesday evening, October 5th, with President J. H. Halderman, Pottstown, Pa., presiding. Others present included Vice President, Charles J. Garrett; Treasurer, Isaac A. Passmore, Prof. Thomas A. Bock, all West Chester, Pa.; Joseph Phipps, Uwehland; William Pitt, New London, and Furman Gyger, Kimberton.

Mr. Halderman gave a very concise report of his attendance at the meeting of the State Chamber of Commerce, at Harrisburg. One impressive fact was that the president of the State Chamber of Commerce in his address dealt with Pennsylvania's agriculture first, and called the attention of the people to the fact that unless the farmers are compensated for their work in proportion to the industries, Pennsylvania and this country will become an industrial State and country and that we will be dependent upon other countries for our food products. He also reported that Mr. Meredith gave a very interesting address similar to the one delivered at the Lenape meeting, August 23rd. The State Chamber of Commerce has just recently added the Bureau of Agriculture with Mr. Byers in charge.

The question of having an agricultural exhibit at the annual meeting in January was discussed by Mr. Passmore; it was decided to try and interest the various agricultural organizations of the county to exhibit some of their best products at this time. In the future, this exhibit will grow and become an annual event in Chester county. This will take place prior to the State Show at Harrisburg. The exhibits for the State Show can be taken directly from here to Harrisburg.

In the absence of Mr. Temple, secretary of the Fair Association, Mr. Charles Garrett presented for consideration the advisability of using the Farm Bureau as headquarters for the fair board several weeks prior to the fair. The executive committee feel that the Farm Bureau should be made the clearing house for all agricultural organizations and readily granted the request of the Fair Association and all other agricultural organizations are urged to use the Farm Bureau as their meeting place; in fact, farmers transacting business with one another are also urged to use the Farm Bureau office as a place for appointment.

The meeting night was changed to the first Monday of the month, in order to suit the convenience of several members.

The majority of the committee will attend the group conference of county agents and farm bureau executive committees of the eleven southeastern counties, at Reading, October 14th.

The county agent gave a report of the past month's work which included livestock survey work, wheat and alfalfa strain tests, and the meetings of White Horse, Sand Hill, Brandywine Grange and the Doe Run Farmers Club. At these places, talks were given on community organization and farm bureau work by the county agent.

A new line of work for the next year will be started this next month. It will consist of several poultry demonstration farms distributed in communities over the county. The work will be on a community basis. The farms selected will be used as a place for several meetings during the year, at which time breeding, marketing of eggs, culling, etc., will be discussed by specialists from the college.

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Editorial

Perplexities confront the dairy industry from coast to coast. Every primary milk market believes it has troubles of its own. It probably has. The main factor today, however, appears to be on the part of the manufacturers of milk products who have large stocks of goods, in various forms, which they are unable to market—without appreciable money loss.

These interests have either refused to buy further supplies of milk for manufacture or to do so at prices far below the market. Either plan is bad. One throws the loss apparently on the producer, as it leaves him no market for his milk, while the other, instigating lower selling prices for processed products, has a tendency to, and if carried out to any extent, will, break the market for fluid milk.

The great milk producing centers and primary milk markets are affected in proportion to the greater or less volumes of milk that go into manufactured products in their territories. Nevertheless, the influence of the general situation has a pronounced bearing on the entire industry.

Here crops out that old principle of passing the buck along until it reaches the raw producer. The manufacturer, or the middleman seldom wishes to take his losses, if they can be passed on down the line. In this case the manufacturer of milk products doesn't want to write off his loss, if it can be passed on to the dairyman. If condensed goods are not produced in quantity until stocks are absorbed and prices hold up for his products, the manufacturer gets out. The dairyman at present costs of production, has to take a loss and the manufacturer believes probably that a little more won't do any harm.

How far the producer will be driven in this kind of harness, is a question. Some of them will balk—and what then? Down goes production in the face of the short season of the year, and if production does shorten—owing to high

costs of feeds, labor, etc., it may take a considerable length of time to get production back again.

The fluid milk market has so far been unaffected in this territory. Dealers, practically all, are paying full prices and the consumer has made no objection to retail prices. At the present costs of food elements, milk, at current prices continues the most economical buy.

At the same time producers should not, under the circumstances, force an over supply on the market. Just so much can be absorbed in fluid consumption—more than that amount will cause a reaction and a downward price movement. Producers should therefore not try to increase production for production's sake alone, by going into the market and buying cows, with an idea of increasing their income, it would be better to weed out the unprofitable cows and thus gain through more economical production.

It appears to be the determined effort of Secretary of Treasury, Houston, formerly Secretary of Agriculture, to place burdens upon the farmer, entirely inconsistent with general business practice.

The farmers' credit is becoming more and more restricted. Under present rulings, we understand, credit to the farmer at the banks, is to be extended only to those owning realty. In other words, the farmer is not to be allowed to borrow money using his crops in his granaries as security for the same, because it might restrict crop movement and enhance prices.

If the farmer cannot borrow money to carry on his business, he must sell his crops regardless of their value, at what they will bring. He is thus discriminated against, in that buyers of his crops or grain can borrow on warehouse receipts and carry their business along on such borrowed money, selling the grain when the market warrants.

We most emphatically voice our protest, as should every farmer, against such a procedure, and demand that the farmer should be accorded like facilities and the right to conduct his business as is accorded other manufacturers and producers. If the farmer is to continue in business, producing food for the nation, he must have the same facilities, or credits that may be extended to those engaged in other lines of business.

PENNSYLVANIA STATE FAIR

A movement has been started, through the efforts of the "Pennsylvania Farmer," toward the establishment of a State Fair in Pennsylvania. This effort we fully endorse. The various so-called fairs have, in many cases, been drifting year after year, more and more toward commercialism. In educational features, from an agricultural standpoint, many of the fairs have been sadly lacking and the flagrant type of catch penny exhibitions are being over done.

There is no doubt that a real wholesome State Fair under the direction and care of farmers—under State control and guidance, would prove a success. It would bring the agriculture of the State to the front. The exhibition of cattle alone would be well worth the effort.

There are many organizations in the State of Pennsylvania, such as the farm bureaus, granges, dairy organizations, breeders associations, etc., that would lend their aid in this movement. The agriculture interests of the State are big

enough and strong enough to put this over, if they all pulled together.

The Ohio State Fair has been one of the leading educational influences in that State and has aided in its agricultural development and the fair has advertised it until it is known far and wide as one of the leading agricultural States in the Union. This fair is clean. Several of the officers of the Inter-State Milk Producers Association visited the Ohio fair recently and were very favorably impressed with the educational value of the exhibits. More than 5,000 head of livestock were shown. Substantial buildings were filled with field and orchard products, home productions and equipment, educational exhibits, dairy products, boys and girls club work, etc. Acres of farm machinery, including everything from garden hoses to the largest types of tractors, threshing machines, etc., were shown. There was no sign of gambling devices, side shows, fakers, etc.

The annual banquet will be held at the State of Ohio on Monday evening, December 6th, at 6:30 o'clock. It's going to be bigger and better than ever. The eats will be good—so will the music and some of the most prominent men in the agricultural and dairy industry will make addresses. You don't want to miss this banquet. Get your reservations now—tickets \$2.50. They may be obtained from the secretary, R. W. Balderston, 721 Heed Bldg., Philadelphia, Pa.

Hotel reservations should be made at once. Rates at the Hotel Adelphi, European plan, range from \$5.00 to \$8.00 per day for one and \$8.00 to \$10.00 for two in a room. The secretary can make reservations for you.

THE BALTIMORE MARKET

The supply of milk for the month of October in the Baltimore territory was larger than was ever known for the same month. This has been brought about by the abnormal weather conditions prevailing, which has resulted in excellent pastures.

The price for milk for the month of October was not determined upon until the 19th day of the month, at which time the November price was also agreed upon. After an all day's conference with the milk distributors, it was agreed to have the present price, (forty cents per gallon for 4% milk, with a differential of 1 cent per gallon above and below, for each 1/10% butterfat), remain during the month of October, but a reduction of one cent per gallon be made for the month of November, with the same differential. This was agreed to because of the large supply of milk which has existed since the first of September and of the effect it would have in clearing up the market.

While we do not have any condensaries in this territory, the effect of the closing of these plants in nearby places has had its effect on our market.

We are now making plans to take care of a possible surplus next spring, as well as putting on a campaign to increase the consumption of our product.

A great many of our members are culling out their herds, both by selling their low producing cows and having their entire herd tested for tuberculosis. They feel as we do, that this is a good time to do this as it is not good business to keep unprofitable cows or cows that are effected with a contagious disease. If these cows are disposed of at this time it will save many a dollar which would otherwise go to purchasing high priced feed, and which would mean a loss to the producer.

Maryland State Dairymen's Assn.
D. G. Harry, President

THE ANNUAL MEETING

The annual meeting of the stockholders of the Inter-State Milk Producers Association will be held at the Adelphi Hotel, 13th and Chestnut Sts., Philadelphia, Pa., Monday and Tuesday, December 6th and 7th, 1920.

The membership should be fully represented either in person or by proxy. On page 8 of this issue we print the proposed program in full. Six directors are to be elected. Important business is to be transacted and every member should exercise his right to vote and take part in these deliberations. If it is not possible for you to attend, send your proxy—shown on page 8, this issue, and give same to the representative from your local. Every local should send at least one delegate to these meetings. If you have no representative you may send your proxy direct to the secretary of the association, designating who you wish to act for you.

The annual banquet will be held at the Adelphi Hotel on Monday evening, December 6th, at 6:30 o'clock. It's going to be bigger and better than ever. The eats will be good—so will the music and some of the most prominent men in the agricultural and dairy industry will make addresses. You don't want to miss this banquet. Get your reservations now—tickets \$2.50. They may be obtained from the secretary, R. W. Balderston, 721 Heed Bldg., Philadelphia, Pa.

Hotel reservations should be made at once. Rates at the Hotel Adelphi, European plan, range from \$5.00 to \$8.00 per day for one and \$8.00 to \$10.00 for two in a room. The secretary can make reservations for you.

Read the advertisement on page 8, of this issue for full particulars and if at all possible, attend in person. If you cannot be at the meetings, do not fail to send delegates representing your local and let him vote your proxies.

We wish to advise every milk producer to obtain and read "The Price of Milk" by Dr. Clyde L. King, just off the press.

Dairymen should post themselves fully on the milk situation in every department. The industry has grown and specialization has been necessary in the marketing of milk. Health and hygiene regulations are being forced in practically all of the large buying and consuming centers. The whole complexion of the industry has been changed.

Dr. King, in his book has treated this difficult subject in a clear, concise and easily readable manner. It contains valuable data which every dairyman should have.

Get a copy, read it, and keep it at hand for reference. Particulars are given in an advertisement on page 11. Look it over and send us your order for the book.

Will the dreaded hoof and mouth disease make its appearance in its customary cycle this year? Dr. T. E. Munce, head of the Bureau of Animal Industry, Pennsylvania Department of Agriculture, while hopeful that the six year cycle for the disease will be broken this year, is keeping a close eye on the situation and the entire field force of his bureau is on the alert for any suspicious signs that would indicate a re-occurrence of the disease.

The last outbreak of the disease was in the fall of 1914. The outbreak previous to that was in 1908, while another outbreak occurred in 1904.

LATEST MARKET PRICES

November Milk Prices

Subject to change whenever warranted by market conditions
F. O. B. Philadelphia

Test Per cent.	Price per 100 lbs.	Basic Quantity Price per quart
3.1	4.24	9.1
3.2	4.28	9.2
3.3	4.32	9.3
3.4	4.36	9.4
3.5	4.40	9.5
3.6	4.44	9.6
3.7	4.48	9.7
3.8	4.52	9.8
3.9	4.56	9.9
4.0	4.60	10.0
4.1	4.64	10.1
4.2	4.68	10.2
4.3	4.72	10.3
4.4	4.76	10.35
4.5	4.80	10.4
4.6	4.84	10.45
4.7	4.88	10.5
4.8	4.92	10.6
4.9	4.96	10.7
5.0	5.00	10.8

When milk is not tested the price f. o. b. Philadelphia is 10 cents per quart

RECEIVING STATION PRICES

Less Freight and Receiving Station charges

Miles	Freight Rate of 40 qts. 115¢ per 100 lbs. plus 3% war tax	Basic Quantity Price per 100 lbs. 3%.
1 to 10 incl.	2.75	3.70
11 to 20	2.85	3.68
21 to 30	2.95	3.66
31 to 40	3.05	3.65
41 to 50	3.15	3.64
51 to 60	3.25	3.63
61 to 70	3.35	3.62
71 to 80	3.45	3.61
81 to 90	3.55	3.60
91 to 100	3.65	3.59
101 to 110	3.75	3.58
111 to 120	3.85	3.57
121 to 130	3.95	3.56
131 to 140	4.05	3.55
141 to 150	4.15	3.54
151 to 160	4.25	3.53
161 to 170	4.35	3.52
171 to 180	4.45	3.51
181 to 190	4.55	3.50
191 to 200	4.65	3.49
201 to 210	4.75	3.48

Freight rates deducted on a basis of 40 quarts—115¢ per cent. of 40 quarts, plus 3 per cent. war tax. Four-tenths of a cent added or deducted for each tenth of one per cent. butterfat above or below 3 per cent.

SURPLUS BASIS PRICES

4 per cent. milk at all receiving points

	First half	Average
January	\$2.18	\$2.12
February	2.20	2.18
March	2.22	2.19
April	2.24	2.23
May	2.26	2.28
June	2.28	2.30
July	2.30	2.32
August	2.32	2.34
September	2.34	2.36

These prices are based on 120 per cent. of the average monthly or semi-monthly price of solid packed 92 score creamery butter, New York City. In May, June and July an increase of 10 per cent. and in August an increase of 5 per cent. in the basic quantity of milk shipped is allowed.

NOVEMBER COMPARATIVE PRICES PAID PRODUCERS

4 per cent. butter fat, per 100 pounds

	Eastern Territory	Basic
Philadelphia, 50 mile zone	\$4.01	
New York, 200 mile zone	4.05	
Pittsburgh, outlying points	8.75	
Baltimore, per gallon f. o. b.	3.39	

RETAIL MILK PRICES

Pasteurized and bottled
Subject to Board of Health Regulations
Grade B or Market Milk

	Quarts	Pints
Philadelphia	16	9
New York	16	10
Baltimore	16	10
Pittsburgh	16	10

PRICES PAID PRODUCERS

f. o. b. dealers station

And retail selling prices, Market Milk, nearby cities and towns

	Producers	Retail
	Quarts	Quarts
Allentown, Pa.	9 1/2	15
Camden, N. J.	10	15
Chester, Pa.	10	15
Easton, Pa.	8 3/4	14
Harrisburg, Pa.	9	14
Norristown, Pa.	9 1/2	14
Reading, Pa.	9	14
Trenton, N. J.	10	15
West Chester, Pa.	9 1/2	15
Wilmington, Del.	10	15
York, Pa.	9	14

MONTHLY PRICES OF MILK

F. O. B. Philadelphia and at receiving stations in the 50 mile zone, at 3 per cent. butterfat. Four cents being added or deducted for each one-tenth per cent. fat above or below 3 per cent.

	F. O. B. per quart Phila.	Receiving station 50 mile zone per cwt.
January	8.1	3.21
February	8.1	3.21
March	8.1	3.21
April	8.1	3.21
May	8.1	3.21
June	8.1	3.21
July	8.1	3.21
August	9.1	3.67
September	9.1	3.61
October	9.1	3.61

SEPTEMBER BUTTER PRICES

92 score solid packed creamery butter, cents per pound

	New York	Phila.	Chicago
1	61	60 1/2	58 1/2
2	61 1/2	61	59
3	62 1/2	61 1/2	59
4	63 1/2	62 1/2	59
5	63 1/2	62 1/2	59
6	63 1/2	62 1/2	60
7	63 1/2	62 1/2	60
8	63 1/2	62 1/2	60
9	61	61	60
10	61	61	60
11	61	61	58 1/4
12	59 1/2	58	54 1/2
13	59 1/2	58	54 3/4
14	59 1/2	58	54 3/4
15	59 1/2	59	54 3/4
16	59 1/2	59	54 3/4
17	59 1/2	59 1/2	54 1/2
18	59 1/2	59 1/2	54 1/2
19	59 1/2	59 1/2	54 1/4
20	58	58	54 1/2
21	58	57 1/2	54 1/4
22	58	57	56
23	58	57	56
24	58	57 1/2	57
25	58	59	58
26	59	59 1/2	58
27	60	60 1/2	59
28	61	62	60 1/2
29	62	62	60 1/2
30	62	62	60 1/2

NEW YORK MILK CONDITIONS

The Dairymen's League has sold the leading buyers in the city November milk on the same basis as prevailed for October, \$3.65 for 3% milk in the 200 mile zone. The situation is, however, still complicated, owing to the action of the condensaries. The Dairymen's League is actively engaged in having its members sign new contracts involving a plan to pool all the farmers milk in their territory. Over 35,000 contracts, it is stated, have been signed and but 15,000 remain to be obtained to put the plan in effect. The League is meeting with extensive opposition and propaganda on the part of the large condensaries in this movement, while while hindering will not, it is believed, interfere with the League accomplishing its purpose in a reasonable time.

USE MORE MILK

You have often heard and seen the slogan "Use More Milk." It has been consistently preached to consumers in talks, in advertisements, etc., since the beginning of the late war. The food value of milk—from an economical as well as a monetary standpoint has gone forth to hundreds of thousands. You, Mr. Producer, have been preached at the same as the city consumer.

The American public must be educated in the greater use of milk as a food and the farmer needs this education as badly as does the city consumer. If this great milk industry is to advance, or even hold its own, more milk must be consumed. No great quantity of extra milk per capita would have to be used to care for all surplus stocks of condensed milk in this country, if every body did their share—two tablespoonsful per day per person, continued through the year, would take care of it all, it has been stated.

We are too readily inclined to think of milk in the way of a beverage, not as a food, in which lies its chief value. A beverage we can usually get along without, not so with milk. Health and hygiene societies and medical author-

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS

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Milk Producers Review

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Signature.....
Date..... P. O. Address.....
Member..... Local

ities have proven it a vital necessity for our health.

Many farmers are inclined to be stingy with their home milk supply. We are well aware that many depend entirely upon the sale of their milk for current monthly expenses on the farm. Their efforts in many cases therefore has been to ship as much milk as possible and obtain the greatest money return. If this be done at the expense of enough milk left on the farm for home consumption, sufficient to maintain the health, particularly of the children, the mistake is obvious.

If every dairyman doubled the quantity of milk used on the farm table he would be the ultimate gainer. The value

of a quart of milk as a food, equals 1 lb. of beefsteak, 8 eggs or 1 lb. fowl. Ship milk and buy other foods at two and three times the cost is poor economy.

Surplus milk on the city markets in general is a very important factor in prices paid producers for milk. If every farmer used a little more milk at home, it would entirely wipe out the surplus in some markets.

Milk producers, it's in your hands—more milk must be used—if the industry is to be maintained and grow. We must advertise the value of milk as a food to the great consuming public in the cities and towns and we must practice what we preach.

You get More Milk or Your Money Back

No matter how much milk your cows are producing on their present ration—Larro-Feed must make them produce more—or your money back.

That is exactly what the Larro guarantee means to you—more milk or your money back.

The one way to put your dairy on a business basis is to find out exactly how much you are feeding each cow and exactly how much milk she is giving.

Weigh Your Feed— Weigh Your Milk

This has been our advice to dairymen for eleven years—it is the secret of the success of the men who feed Larro. They know just what they are doing and they have learned that it's not how much a feed costs but how much milk it produces that is important. That the feed which makes the most profits is the cheapest feed they can buy.

Write for names of Larro users in your neighborhood and the name of the dealer nearest you.

The Larro-Milling Company
Larroe Bldg., Detroit, Mich. (2)

Larro-feed

Many Imitations Prove Its Superiority



Prest-O-Lite

STORAGE BATTERY SERVICE

Prest-O-Lite Service Prevents Costly Repair Bills

YOUR storage battery should be tested regularly. Perhaps it needs repairing—who can tell? There's one sure way to find out.

Call and let us test your battery today. Should a test indicate the necessity for repairs, we have a service battery for you to use while the work is being done. You have the continuous use of your car. When your battery is ready we will notify you promptly. You will be agreeable surprised at the moderation of our charges in these days of high prices.

Pusey-Young Storage Battery Station
117 W. MARKET ST. WEST CHESTER, PA.

COATESVILLE, PA.

FEEL GARAGE, BERWYN, PA.

Straw is too valuable to be allowed to remain unused. Fresh oat straw, as well as wheat straw, can be used as a roughage in wintering stock. It is also advisable to use it liberally as bedding for

farm animals, as it adds to their comfort and absorbs the liquid part of the manure, which is the most valuable portion.

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS

CO-OPERATION BRINGS PROFIT IN MARKETING

Co-operative marketing of all kinds of farm produce has been successfully worked out in Prentiss county, Miss.

Buyers formerly went into the county and purchased at their own prices, often 25 per cent. below the outside market. The county agent of the United States Department of Agriculture succeeded in getting the farmers to load a car of corn, each farmer's contribution being weighed separately and a record kept by one of the banks. The car netted 25 cents a bushel over previous prices, and the local market rate arose 25 cents as a result.

A co-operative shipment of hogs followed and after several successful experiences the Farmers' Co-operative Association of Prentiss county, Miss., was organized and a regular marketing agent employed. This organization did a business of more than \$250,000 in 12 months, at prices considerably in advance of those formerly realized. Deposits in two local banks were more than doubled in two years.

NATIONAL MILK PRODUCERS FEDERATION

Fourth Annual Meeting

The National Milk Producers Federation, with which the Inter-State Milk Producers Association is affiliated, held its fourth annual meeting in Chicago, October 12th and 13th. The sessions which were held at the Hotel Morrison, were largely attended by representatives from member associations in all parts of the country.

This meeting and its deliberations were of particular interest to the dairy interests in view of the various problems confronting the industry in the readjustment from war time conditions.

These various problems were outlined in an address by President Milo D. Campbell, who stated in part: "That a birds eye view of the business we represent, presents five millions of farmers, with 23,000,000 cows, furnishing one-fifth of the food for the nation. These cows supply 90,000,000,000 pounds of milk each year, of which 44 per cent. is used as fresh milk, 36 per cent. for butter, 4½ per cent. for cheese, 5 per cent. for condensed milk, 4 per cent. for ice cream; the balance being absorbed for hogs, calves and wastage.

We find ourselves upon the afterlife of a great war that gave us many experiences and taught many lessons.

He told of the work of women on the farm, farm decadence, fruit rotting, etc. How the farmer was confronted with lower grain prices, the description employed in marketing discrimination and the law of supply and demand.

Condensed Milk Prices

"A glance at market conditions, covering the last six months, from April 7 to October 6, show prices of condensed products to have been as follows:

	Per case April 7, 1920	Per case Oct. 6, 1920
Eagle, condensed	\$11.00	\$12.85
Leader, condensed	8.00	10.65
Carnation, tall, unsweet'd	5.50	7.50
Carnation, baby unsweet'd	5.00	6.85
Pet, tall, unsweetened	5.50	6.95
Pet, baby, unsweetened	3.75	4.60

"Notwithstanding the surplus the condensers have on hand, the price named to the public does not comport with the price they pay for the farmers milk. Seemingly, with perfect understanding among themselves, they hunt out the same old goat that has always borne the food losses and announce that for the month of October the farmer must accept from 50 cents to \$1.00 per hundred less for milk than he received in September.

"No longer does any sane man call the milk producer a profiteer. No one claims that he can produce milk at the price offered, but because he has no other outlet, no ready market that he can reach, no voice in this price fixing, he is compelled to submit. The dairy farmer cannot change from selling whole milk to a condensary, to a creamery over night. Costs of production, while not uniform, have been arrived at with some degree of certainty. In many districts milk cannot be produced for less than \$3.26 per hundred, without a penny profit.

Recently the price paid consumers, re-

(Continued on page seven)

PHILADELPHIA SURPLUS PLAN

(Continued from page one)

December as basic months, will give us too much milk in the fall of the year, yet remains to be seen. We must remember that the fall of 1919 and so far the fall of 1920 have been unusually favorable to milk production in this territory. In 1919 we had an open season; no heavy frosts until nearly mid November, open pastures, in fact no real unfavorable weather until Christmas. So far this year we have had no frosts worth mentioning. We have had the best pasture in years. Under the circumstances we have had plenty of milk so far this fall, not taking into consideration the fact that the farmer is endeavoring to make a high production record for his basic standard for next year.

We realize that under this plan we have relinquished the trump card, scarcity of production, particularly in the fall months, to aid us in obtaining a higher price. At the same time it must be remembered that it removes the same factor on the part of the dealer who lost his customary surplus argument to beat the price paid producers down during flush supply periods.

Under the Philadelphia Surplus Plan dealers were not expected to have any surplus, in other words, they were expected to manufacture any milk above the amount of fluid milk required for public consumption, into ice cream, butter, etc.

We feel that with or without co-operation, if both buyers and sellers live up to the Philadelphia Selling Plan neither one nor the other will be any of the worse off, from a monetary standpoint, when the year's average is taken.

The plan has an additional value in that it educates the farmers to make closer to an average supply, throughout the year, ultimately eliminating the customary surpluses, which were so frequently used as a club to upset the market and beat down prices paid producers.

NATIONAL MILK PRODUCERS FEDERATION FOURTH ANNUAL MEETING

(Continued from page six)

ported in the Chicago Tribune, was dropped from \$3.70 to \$2.52; other plants cut from \$3.70 to \$2.65 per hundred.

"We invite investigation of our costs of production and we do not recall another industry of today that is inviting an investigation of costs of production.

"Conditions are alarming. Remedies are possible, but are delayed. Co-operation on the part of the farmers has made wonderful strides and must be continued for the farmers preservation. Our independence and our existence now depends upon heroic action."

The various sessions were given over to general discussions pertaining to the dairy conditions. Marketing problems, co-operative organizations, and the recent action of the condensaries in reducing prices, were discussed at length, following which the following resolutions, among others were adopted.

Curtailment of Credits and Prices of Farm Products

Resolved that we voice the conviction of the farmers of America, in fighting for the clear right to market their pro-

(Continued on page ten)

There's Nothing So Dark as the Inside of a Cow Unless—

it's the inside of a bag of feed.

Look at feeds—they all appear alike and you can't tell anything about them.

Analyses and names don't deliver the goods.

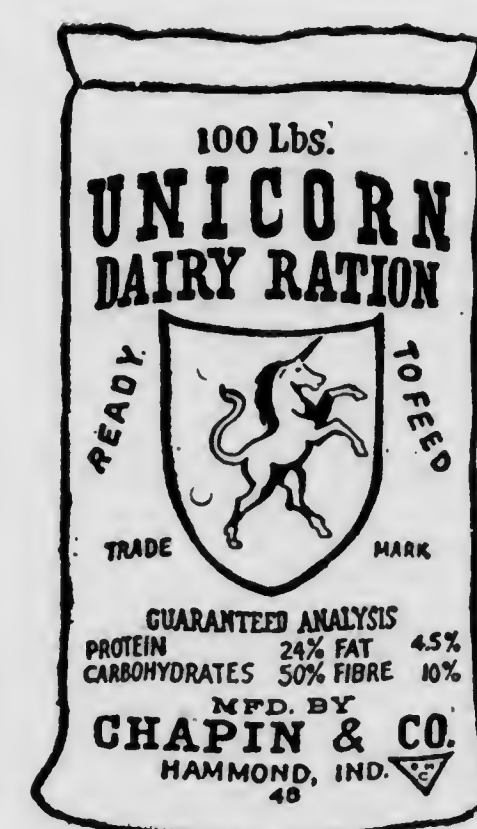
The only proof of a cow or a feed is in the milk pail.

Unicorn has been proved by scores of Testing Association winners to be the greatest milk and largest profit producer.

If it is profits you want, then feed Unicorn.

Forget the price and look at the profits.

CHAPIN & COMPANY
Chicago



Porter County, Indiana, Cow Testing Association reports Morgan Brothers led all herds for August, 1920. Their 19 cows averaged 40.3 lbs. fat and are fed Unicorn Dairy Ration the year round.

OCTOBER MILK CONDITIONS

(Continued from page 1)

has been weak, the price for fluid milk is being generally maintained. Unless conditions change, and they are difficult to foresee, the same price basis for fluid milk will be maintained during November.

The butter market has been irregular and prices have been easy. Early in the month the market appeared strong with prices for 92 score butter reaching 69½ cents. There was a gradual weakening as the month advanced until 57 cents was reached, followed by a recovery to 62 cents. The average price for the month was 60.4 cents. Foreign butter continues an important factor in the market. Importations in considerable quantity coming from Denmark, Holland and Argentina.

When tired drink milk—drink milk not to be tired.

When old drink milk to keep well.

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS



This Way to Higher Milk Production

"Letting well enough alone" never pays the highest dividends. Give your cows a feed that will produce more milk than the feed they are getting now and you gather greater profits without working any harder.



INTERNATIONAL SPECIAL DAIRY FEED Makes Milking Make More Money

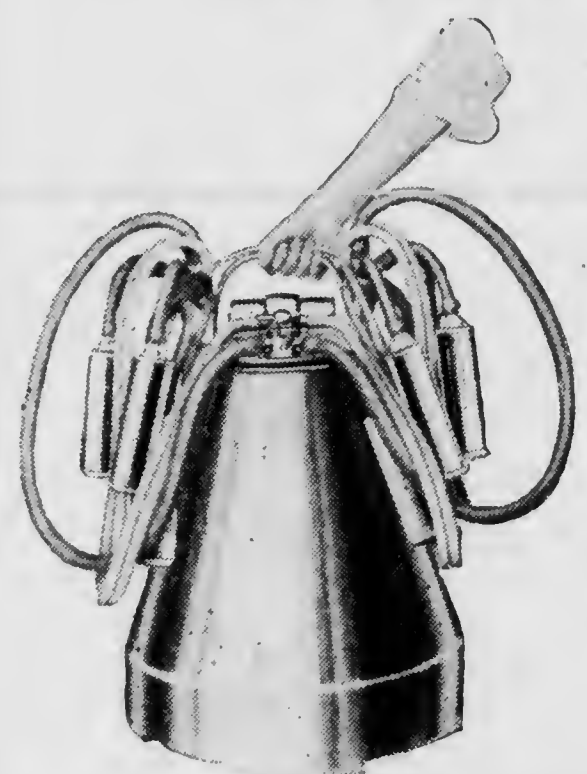
This feed is guaranteed to produce more milk than any other feed of similar analysis. Feed International Special and watch milk production go up two or more quarts per cow each day. You must be satisfied that you are feeding this feed at a profit or we'll make good the difference to you. International Special Dairy Feed merits getting immediately from your dealer, or from us if your dealer hasn't it.

International Sugar Feed Co., Minneapolis, Minn.
Mills at Minneapolis and Memphis

LIVE AGENTS WANTED

The NU-WAY Sanitary Milker

A PRODUCT OF EXPERIENCE



A notable feature of our Fair season just closed was the complimentary remarks passed on the Nu-Way Sanitary Milker by users of other makes of milking machines. This was quite as gratifying to us as the interest shown in our machine by parties interested in buying immediately.

The Nu-Way Sanitary Milker was designed by an organization that had learned from long experience that a thoroughly successful milking machine *must* give absolutely uniform action to the cow, apply it regularly, evenly and without variation; and also be constructed so that every part coming in contact with the milk can be thor-

oughly and quickly cleansed.

The NU-WAY has many exclusive features, such as visibility of the milk flow at each teat cup; the action of alternately milking two teats at a time with but the one pulsator and one pipe line; and the pulsator constructed without either piston or diaphragm plate to wear and change the action to the cow. These are what make the Nu-Way machine the most practical, sanitary and dependable milking machine on the market to-day and is why so many users of other makes of milkers have been so generous in their opinion of it.

Let us send you our illustrated catalogue, also the name of our nearest Nu-Way user. Then make a comparison with any other machine you may have in mind. This will not obligate you in any way, and you may find that it has been the means of placing before you one of the very best investments before the dairy farmer to-day.

STANDARD SUPPLY COMPANY

WEST CHESTER, PA.

General Distributors For Pennsylvania,
New Jersey, Delaware and Maryland.

Both Phones

IMPROVE YOUR HERD

Cut Out the Boarders—With the high cost of feeds dairying is a close proposition. Replace the poor milkers with cows you raise yourself and know what they will do. The best for this purpose is



A complete food for young calves. Supplies them with every feeding element necessary for rapid growth in the most easily digested form. They thrive on it as on nothing else. Results Guaranteed

Saves Milk **Saves Calves**
Costs Much Less to Feed

Sold in spotted bags that hit the spot with calves.
Ask your dealer or write
RYDE & CO. CHICAGO, ILL.

"Shrinkage" in bulk carloads of potatoes averages 3 per cent., according to a survey of marketing conditions made by the United States Department of Agriculture. This amounts to 1200 pounds

per carload. The "shrinkage" is less where potatoes are sacked, as this reduces pilfering and rough handling to the minimum.

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS

MILK PRICES AND THEIR EFFECT ON PRODUCTION

(Continued from page two)

must pare production costs to the bone. All non-profit producing cows must be eliminated from the herds. The cow that will not produce in sufficient quantity to make a profit must go—and there are thousands of them right in this district. She must not be sold to your neighbor or to a local dealer, where she would find her way again into the herd of some unsuspecting dairy farmer and still be a source of supply, unprofitable to her owner—but she should go to the butcher for slaughter as a beef.

The dairy farmer, in doing this, will have to take a money loss in selling his unprofitable producing cows as heaves, but not so great a loss as would be if these cows were maintained in the herd, producing milk for production's sake alone and yielding no money profit. In fact, not even paying for their keep, in many cases, and bringing down the average of the profitable producers in the herd.

To meet the radical changes involved in lower prices, the dairy farmer can only do as is done in other industries, leaving the chips fall where they may. High labor costs can only be combated by the use of labor saving devices. Mechanical appliances will have to be installed to save high labor costs. Modern equipment for field work, labor saving devices in the barn, stable and dairy, go a long way toward reducing labor costs.

Build up your herd from an individual production standpoint, eliminate the boarder—be it bull, cow, horse or laborer. Get your business down to a dollar and cents profit making basis. If conditions change, change with them; even if it be radical. Get ready to start as soon as you can. It will pay you in the end, even at a high or low range of selling prices for your milk.

of surprising uniformity, their apparent purpose being to stop the production of condensed milk until their hoarded supply can be disposed of at prices far higher than justified by the present prices of raw milk and sugar, thus at one blow forcing dairy farmers out of business and compelling consumers to pay an unduly high price for condensed milk.

Therefore be it resolved,
(1) That such arbitrary acts on the part of the manufacturing companies but further illustrates the danger incurred by dairy farmers in permitting middlemen to control the agencies and facilities for processing and marketing milk, and

(2) That we urge each member organization to carefully consider the advisability of farmers exercising the right to process and market their own products.

Government Operation of Nitrate Plant
Resolved that we urge the enactment into law of the bill now pending in Congress authorizing the government to continue to operate Muscle Shoals air fixation nitrate plant.

Capper-Volstead Bill

Resolved that we urge the enactment into law of the Capper-Volstead bill now pending in the U. S. Senate in the same form as it passed the lower house of Congress.

"THE PRICE OF MILK"

By CLYDE L. KING, Ph.D.

Formerly

Chairman, Governors Tri State Milk Commission (Pennsylvania, Maryland, Delaware), Federal Milk Commissioner for the Eastern States, Milk Price Arbitrator for the State of Pennsylvania.

Comprehensive Treatment of the Milk Industry in All Its Phases

NOW READY FOR DISTRIBUTION

Every Dairy Farmer Should Have a Copy of This Book

TABLE OF CONTENTS:

Introductory—Chapter 1. The Public Interest in the Price of Milk. Part 1. The Price to the Producer—Chapter 2. The Forces That Fix the Price of Milk. 3. Manufactured Milk Products and the Price of Milk. 4. The Price Interdependence of Local, Primary and International Markets. 5. The Cost of Production. 6. Shall Dairywomen Organize for Collective Bargaining. 7. Policies of Dairywomen's Organizations in Their Relation to Price.

Part 2. The Cost of Milk Production. 8. The Cost of Milk Distribution. 9. Sanitary Requirements in Their Relation to Price. 10. How Shall Milk be Distributed? 11. Can Milk Distribution Costs be Lowered? 12. The Public Interest in Milk Distribution.

Part 3. Fair Price Policies. 13. The Food Value of Wholesome Milk. 14. Co-operation and Price. 15. Fair Price Policies.

Endorsed by Herbert Hoover, former Food Administrator; John McFabe, International Milk Dealers Association; Margaret H. Boden, Chm. Food Section, Philada. Fair Price Commission; R. W. Balderston, Secty. Inter-State Milk Producers Association.

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International

MOTOR TRUCKS

FOR LOW COST HAULING

Farm Operating Equipment

INTERNATIONAL HARVESTER CO.

OF AMERICA

216-220 N. Twenty Third St.

Philadelphia



THE DAIRY LABORATORIES

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Consulting and Analytical Chemists
Complete Chemical and Bacteriological Analysis of Milk, Dairy Products, Foods and Waters

FLY SPRAY TO KEEP FLIES OFF DAIRY CATTLE

Chlorine Solution to Sterilize Milk Utensils Write for information
Dr. Lee H. P. Maynard, Milk Expert H. C. Campbell, B.S., M.D., Ph.D., Chemist
Dr. H. S. Johnson, Bacteriologist Ralph Fort, Assistant
Branches at Washington, D.C. Pittsburgh, Pa. Baltimore, Md. St. Louis, Mo.

ACCREDITED HERD PLAN IN PENNSYLVANIA

Pennsylvania now has 334 fully accredited herds of cattle, according to a report of the Bureau of Animal Industry, Pennsylvania Department of Agriculture. The State ranks fourth in the United States with excellent prospects of being a contender for first honors, within the

near future. Pennsylvania has also established the unusual record of having kept every one of its accredited herds intact.

The Officially Accredited Herd plan of the Pennsylvania Department of Agriculture, in co-operation with the Federal department, is rapidly winning favor in all sections of the State. One of the

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS



Keep Farm Animals Healthy

—full of life and vigor. International Stock Food Tonic helps them to properly digest and assimilate their food. Keeps their blood pure—helps them to avoid disease. The feed saved more than pays for it.

INTERNATIONAL Stock and Veterinary Preparations

—include International Stock Food Tonic, Hog Tonic, Worm Powder, Animal Dip, Pheno (Disinfectant), Calc Medicine, Heave Powder, Distemper Powder, Gall Salve, Poultry Preparations, Silver Pine Healing Oil and many others.

Successful for 30 Years

A steadily increasing demand for over a quarter of a century proves their popularity. There's an international preparation for every farm animal.

Ask Your Dealer

FOR SALE

REGISTERED HOLSTEIN BULL CALVES

From Dams with Large Cow Testing Records and from a Sire whose two nearest Dams, as Helpers, averaged 23264 lbs. Milk and 1003 lbs. Butter in 365 Days

I. V. OTTO BOILING SPRINGS FARM CARLEISLE, PA. R 6

Hood Farm Abortion Remedy

and

Hood Farm Breeding Powder

Will Check and Prevent

ABORTION

If you are having trouble from abortion, order these two Remedies at once, give them a thorough trial and we are sure that you will be pleased with the result.

Chemung, N. Y.
Gentlemen:—For the enclosed five dollars please send me the Abortion Remedy and Breeding Powder. Have had splendid success with your Remedies. No more abortion.
PHIL WYNKOOP.

PRICES: Abortion Remedy, prepaid, \$1.25, \$2.75 and \$9. Breeding Powder, prepaid, \$1.15, \$2.75 and \$5. Injection Tube, by mail, 90 cents. One medium Breeding Powder, one medium Abortion Remedy, one Tube, prepaid, \$5.75. Please mention this paper.

C. I. HOOD CO., Lowell, Mass.

Reading Bone Fertilizer

Quality Service Satisfaction
Feeding the World: The American farmer's job. To do your utmost the land should be fed too. Stick to the old dependable when it comes to feeding the land—Reading Bone Fertilizer.

(This trade mark means quality)

Reading Bone Fertilizer Co., Reading, Pa.

Ask your dealer for Reading Bone Fertilizer. Write for booklet and further information.



ARE YOU GOOD AT FIGURES

Lingshooken Berkshires Multiply Rapidly



Government experts estimate 16.5% less hogs on farms than one year ago

Order a Brood Sow Now for Fall Delivery

F. M. TWINING

Pineville, Bucks Co., Penna.

ROSECOYD FARM'S

Durocs of Quality

Well Kept Well Bred Well Fed

D. M. STOUT, Hershey, Pa.

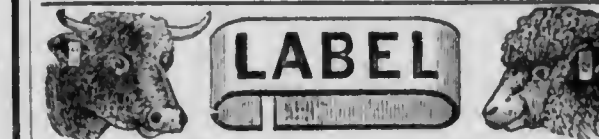
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Live Stock

Auctioneer

WYCOMBE, BUCKS CO., PA.

Sales Anywhere—Anytime



The original ear label used by many Record Associations and best breeders. Will identify your live stock and aid you in keeping breeding and production records. Samples free.

C. H. DANA CO., 87 Main Street, West Lebanon, N. H.

COOLS MILK--IMPROVES QUALITY

STOPS WASTE AND LOSS
Removes odors—halts germ growth—insures uniform, better flavored, long keeping raw material. Insist on the GENUINE IMPROVED CHAMPION

Sops waste and loss. Saves its cost in one week. Recommended by leading creameries and producers. If your dealer cannot supply you, write for special offer.

Folder free. Champion Milk Cooler Co., Dept. 22, Cortland, N. Y.

good, hard earned money and years of devotion to careful selecting and breeding, only to find out some day that many of the best individuals are diseased and must be sacrificed.



What Does Your Feed Cost Per COW?



What does it cost you to feed your cows? It depends entirely on how and what you feed them. The only way you can figure feed costs is to deduct the cost of feed from the value of milk production. If you feed your cows sparingly and try to economize on feed, your feed costs will be high because the first use made of the feed your cows consume goes to provide bodily maintenance and leaves little for milk production. But if you feed the right kind of feed liberally—give your cows sufficient to provide them with both bodily maintenance and milk producing nutrients, your feed cost will be low. That's why

SCHUMACHER FEED AND BIG "Q" DAIRY RATION

fed according to the Schumacher Feeding Plan have become so universally popular with dairymen and farmers everywhere.

Schumacher Feed, the world's greatest carbohydrate feed is composed of the right kind and variety of grains to supply bodily maintenance—to keep cows in tip top shape physically—provide them with energy—stamina, etc. while Big "Q" Dairy Ration, the renowned high quality protein ration, supplies the needed food nutrients to be converted into milk. This combination fed liberally reduces feeding costs because it increases health condition and milk production. You can prove it to your own satisfaction and profit by making a test with any cow. The results will be gratifying and make you a strong advocate of the Schumacher Feeding Plan—the plan that costs less because it produces more. Ask your feed dealer.

The Quaker Oats Company
Address: Chicago, U. S. A.



Save Time, Save Trouble ~ get more milk with UNION GRAINS!

It takes time to mix special feeds and in the absence of the most careful selection and tests you can't be sure of the ingredients. Let us take the trouble off your hands and give you a certainty!

For 17 years Union Grains has been made to the same splendid formula. Hundreds of dairymen—feed experts themselves—have tested it against the best of home mixed feeds—and then adopted Union Grains for good! They know it pays!

For the man who appreciates the good business of feeding good feed to good stock and who has plenty of other work to do Union Grains is a God-send! Try a load now!

Ask for a Union Grains Cost Sheet. It will show you where your profit comes from, and help you spot the "boarders" in your herd.

Other Ubiko Products: Ubiko Stock Feed, Ubiko Buttermilk Egg Mash, Ubiko Buttermilk Growing Mash, Ubiko Pig Meal.

THE UBIKO MILLING CO., Dept. I Cincinnati, Ohio



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EMPIRE MILKING MACHINES



THE EMPIRE MESSAGE

Ever put your thumb in the Empire Teat Cup? Once you do you'll know why there are probably more Empires in use than any other milker made. The Empire quietly, quickly and regularly, massages the cows teats on three sides from tip to udder—an exclusive patented Empire feature—and one absolutely essential for proper milking. Of course, the Empire's a better milker.

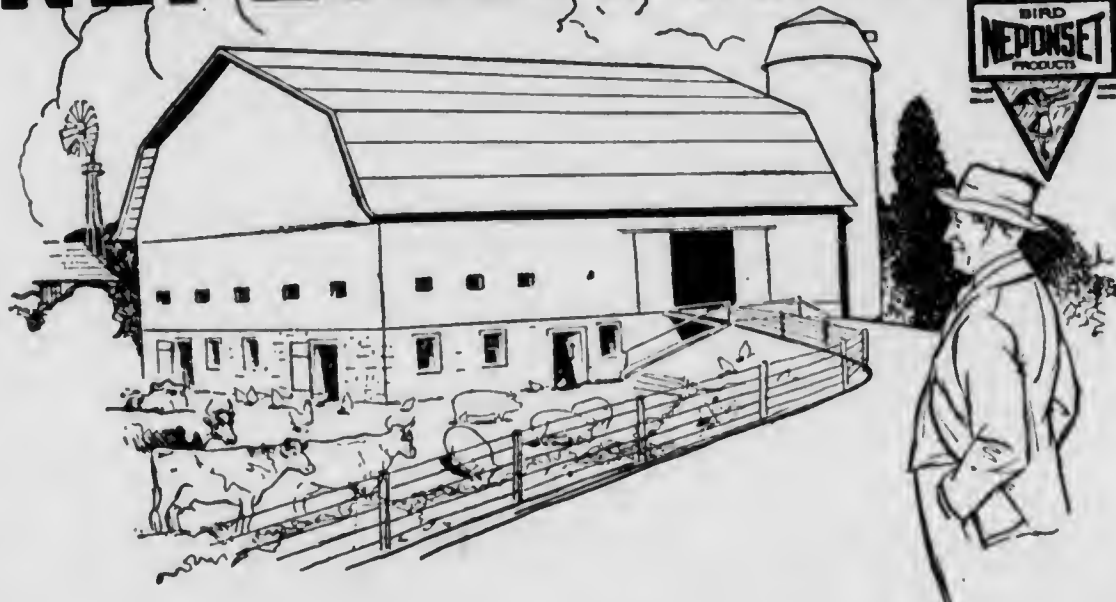
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WEST CHESTER, PA.

NEPONSET ROOFS



The Yardstick of Roofing Value. What is it? It's the cost per square foot per year of service

Measure roofing values by the true yardstick of service rendered and Bird's Neponset Paroid will be your choice. Paroid has given over twenty years of service on roofs from Maine to Panama.

Every roll complete, with nails and cement. If your dealer does not carry Paroid, we will ship direct to you.

BIRD & SON, inc. (Established 1795) East Walpole, Mass.

Milk Producers Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE INTER-STATE MILK PRODUCERS ASSOCIATION, Inc.

VOLUME I

WEST CHESTER, PA., AND PHILADELPHIA, PA., DECEMBER, 1920

NUMBER 8

NOVEMBER MILK CONDITIONS FOURTH ANNUAL MEETING

Unfavorable Situation of Condensaries Influences Prices

The supply of fluid milk in the Philadelphia milk shed continued heavy throughout November. Weather conditions, until late in the month favored producers. For a large part of the month cows were still on pasture. Producers, in their efforts to make a large basic quantity during the last three months of the year, continued maximum production.

On the various milk platforms, there was almost a constant over supply of milk. Prices for such surplus milk averaged close to 8 cents a quart.

All these conditions contributed in making November the most unsettled month that has been experienced for years.

It was impossible, even from day to day, to be certain that prices would be held through the month. That a break must come was certain. How much of a reduction would be necessary to stabilize the market was unknown. A cut

market prices for the better grades of butter without taking a considerable loss.

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Inter-State Milk Producers Association

Several hundred delegates, representing local branches and members of the Inter-State Milk Producers Association, met in annual stockholders meeting at the Hotel Adelphia, Philadelphia, Pa., on Monday and Tuesday, December 6th and 7th.

The meeting was called to order on Monday morning at 10 o'clock by President Frank P. Willits. H. D. Allebach was elected presiding officer of the stockholders meeting. Following the transaction of routine business, the meeting went into an election for six directors.

On motion, the chairman appointed a nominating committee consisting of

It was recommended by the nominating committee and ordered by motion, in the meeting, that the board of directors be instructed to increase its number from 18 to 21 in accordance with the by-laws, so as to include a representation from some districts not now directly represented.

The report of the secretary giving details as to income and expenditures during the year was presented and is printed elsewhere in this issue. The report of the auditors was as follows:

"We, the undersigned, having been appointed to audit the books of the secretary and treasurer, have examined the



OFFICERS AND EXECUTIVES INTER-STATE MILK PRODUCERS ASSOCIATION

Sitting, left to right—H. D. Allebach, Vice-President; Frank P. Willits, President; R. W. Balderston, Secretary. Standing—N. F. Gotshall, Field Man; A. B. Waddington, R. F. Brinton. Members Executive Committee—Fred. Shangle, Treasurer; A. A. Miller, Editor Milk Producers Review.

closing their plants, threw a tremendous amount of milk on the market, resulting in a greater amount of fluid milk than could be normally consumed.

Added to this was the offering of cream and whole milk, produced in outlying districts and from neighboring territory (where low prices were paid producers), at prices lower than could be met by local and nearby dealers. This was particularly the case in offerings of cream and bulk condensed milk to ice cream makers, bakers and wholesale buyers. In some cases the price of cream was cut \$5 a can. Whole milk was offered in this market at 7 1/2 cents delivered.

Considerable tonnage of butter, made at condensing plants which were in some cases not prepared to manufacture high grade butter, came on the market. This butter did not command full market prices and in many cases was sold at so low a price that the manufacturers could not pay the producer on quoted

so drastic as 3 cents a quart was advocated by some buyers.

During November, buyers of whole milk for retailing, practically all paid the full price—\$4.01 per cwt. in the 50 mile zone or 10 cents a quart f. o. b. Philadelphia for 4% grade B milk. Manufacturers paid a range of prices based on conditions in their individual territory under agreements with their respective patrons. These prices ranged from \$3.60 down to \$2.25 for 4% milk, dependent on their location. Such a range was admittedly unsatisfactory.

Numerous conferences between the officers and executives of the Inter-State Milk Producers Association, dealers and manufacturers were held during the month, with a view of making some equitable adjustment.

Prices paid in other primary markets were steadily declining, at several points a reduction of 2 cents a quart had been

(Continued on page ten)

Jesse Cope, West Grove, Pa.; W. H. Hann, Raven Rocks, N. J.; Paul Hoffman, Gettysburg, Pa.; L. E. Drumbheller, Earleville, Pa., and E. P. Walls, Easton, Md.

The following tellers were appointed to conduct the election: Joseph Paschall, Brandywine Summit, Pa.; Robert B. McClay, Belleville, Pa., and Ralph Wilson, Rising Sun, Md.

The following names were placed in nomination by the committee:

Frank P. Willits, Ward, Pa.; H. D. Allebach, Trappe, Pa.; Ira J. Book, Strasburg, Pa.; Albert Sarig, Bowers, Pa.; R. F. Brinton, West Chester, Pa.; E. H. Donovan, Brentford, Del.

The names of C. R. Henderson, Chester county, Pa.; H. T. McNitt, Milroy, Pa., were placed in nomination from the floor. The ballot showed the election of F. P. Willits, H. D. Allebach, Albert Sarig, I. J. Book, R. F. Brinton and E. H. Donovan.

same and find them correct with a balance as follows:

	Cash	Fund
Balance on hand when books were audited		
11/26/19	\$2,841.34	\$4,235.50
Total receipts for the year	\$39,222.30	
Total	\$42,063.64	
Total expenses for year 1920	\$41,034.36	
Balance on hand 12/1/20	\$1,029.28	\$3,410.87

We also find in the hands of the treasurer United States Bonds

Signed I. Ralph Zollers, C. M. Emmons, William T. Pyle.

(Continued on page three)

ADDRESS OF FRANK P. WILLITS

President of Inter-State Milk Producers Association, Fourth Annual Meeting December 6-7, 1920

The basic price of milk was maintained at 9c f. o. b. Philadelphia from the time of our last annual meeting until August 1st, though there was a period when the proper spread between this price and the price of surplus milk should have been wider. On the latter date the basic price was advanced to 10 cents in the expectation that market conditions would remain fairly normal at least till after the new year. But the unexpected happened and we meet today in the shadow of a radical price decline of 2 cents per quart just at a season when production costs are generally the highest in the whole year. There are at least three factors which helped to make imperative this unfortunate price decline. (1) The unusually open and moist weather, making unprecedented fall pastures and the consequent greater production. (2) The continued lack of buying power in Europe as shown by the present low rates of exchange, which condition reduced the exports of condensed milk and other products. (3) Present business stagnation and the collapse of almost all food prices. For instance, sugar, the price of which has fallen from 26 cents to 10 cents and less, enters largely into the production of condensed milk and the present stocks of sugared condensed will therefore be necessarily sold at an enormous sacrifice.

Surplus Plan

The prices actually received for milk by individual members during the year have depended on the comparative amount of surplus. The actual results of this plan can be explained by quoting from the paper I read at the recent annual conference of the National Milk Producers Federation in Chicago. "We feel that, in the long run, the plan has been a good one. Taking it on the average over the year, nobody has lost any money. Many have gained. Some few, who produced only summer milk; that is shipped no milk at all in the fall of 1919, on which a basic quantity could be established, may have been a little behind, but we are not ready to say that they lost anything, because, without the plan, the price of basic milk would not have been as high as it was. We realize that under this plan we have relinquished the trump card, scarcity of production, particularly in the fall months, to aid us in obtaining a higher price. At the same time it must be remembered that it removes the same factor on the part of the dealer who lost his customary surplus argument to beat the price paid producers down during flush supply periods."

We have heard some criticism that the surplus plan was responsible for the present market conditions. One might admit this if it were not that these conditions obtain all over the country, regardless of marketing systems employed.

Condensary Situation

Ever since September, the condensary situation has been extremely unsatisfactory to both producer and manufacturers. Before the war less than 3% of the total milk production of the U. S. was condensed. Last year it was almost 6%. Of this latter amount perhaps 2/5 was for export. The remainder was consumed in the home markets. The present surplus of condensed milk in

domestic markets (on our hands by lack of export this past year) represents 1/5 of this amount of 1/5 of the total amount earned. We therefore have in this surplus (1/5 of the total condensed milk produced), only a little more than 1% of the total production of the U. S. But this 1% has been enough to demoralize the markets of the whole country, as the condensaries, in order to get large plant volume, have located in the very heart of the great dairy districts in the East, the central and the Western parts of our country. It's a very definite case of the "tail wagging the dog."

Because of the relatively small volume of this surplus, the recovery of the industry from this present demoralization should be the more rapid, once a permanent peacetime readjustment has been accomplished. Condensaries in Inter-State Milk Producers Association territory have been made temporary arrangements with their shippers during September, October and November, more or less in line with such prices elsewhere. We hope and expect through the recent general adjustment to correct this most unsatisfactory condition. Even had we desired, we could not have held, for any length of time, the dual price level in our territory, for the Philadelphia fluid milk market was seriously affected by the relatively lower prices at which manufacturers bought their supplies, particularly fats. Much of this supply was beginning to come in from points outside our own territorial boundaries.

Feed Prices

Have not been reduced to the farmer throughout our territory as rapidly as to keep pace with the decreasing price of the dairymen's product. This has been largely because (1) local dealers and some farmers stocked feed last summer at peak prices, fearing both poor transportation facilities and higher transportation costs this winter, (2) because manufacturers and mixers have been very reluctant to liquidate at the lower replacement values. There are at least two things we can do to help this situation and they will prove effective (1) feed our home grown grains as far as possible in making up a well balanced ration. Corn at \$1.00 per bushel is only \$38.00 per ton at the most, for corn and cob meal. Oats at 60 cents per bushel means \$41.50 per ton ground. Even ground wheat at present country prices is cheaper than some dealers have charged for bran this fall. (2) By co-operative buying in carload lots. Local dealers will usually bid on such business much lower than when the feed is handled by the sack and sold through the warehouse on long time credits. One neighborhood recently had the advantage of a \$12.00 cut in the price of cottonseed meal at a local warehouse.

Lower Production Costs

These are the days when it pays to keep accurate records of production costs. We have cow-testing associations in almost every county through which you can co-operatively hire an accountant to keep an account with your cows. Our "slacker" cows must go and go now if we are to compete with our dairy products in the world's markets.

(Continued on page seven)

ALLIED DAIRY INTERESTS

Campaign to Increase the Consumption of Dairy Products and Advertise Their Food Value

For some time there has been a general feeling that the various dairy interests in the Philadelphia Milk Shed should definitely co-operate to advertise the food value of all dairy products and increase the consumption within this district. This matter was presented to a recent conference of manufacturers, distributors and producers and as a result the following program and plan of organization has been developed and the December price schedules of the Inter-State Milk Producers Association have had incorporated therein an explanatory paragraph, providing for equitable and adequate financial support for such a program.

General Plan

- (1) To increase the general consumption of milk and milk products through various publicity channels. This, more particularly, should be an educational campaign, through the public schools, health and hygiene organizations, women's clubs, city, county and state organizations, the newspapers and the public in general.
- (2) Through education, to improve the conditions surrounding the production of milk on our farms, so that the product will commend itself to the consumer.
- (3) In this campaign, milk and milk products, as such, are to be considered, not individual products or brands.

General Organization

The methods of carrying out this program shall be through a general committee representing the producers, dealers and manufacturers and the public, which shall be duly organized.

Projects

- (1) Newspaper advertising, accompanied by wide publicity through the news columns.
- (2) Moving pictures "The Fountain of Youth" has already been approved and will be shown in Philadelphia 250 days this winter and will be available thereafter at the service of other towns.
- (3) General educational campaign.
 - (a) in public schools.
 - (b) through women's and consumers league.
 - (c) through Chambers of Commerce.
 - (d) through State Agricultural Departments.
 - (e) through Agricultural Colleges and Experiment Stations.
 - (f) through County Farm Bureaus.

Financing

- (1) By the dealers and manufacturers deducting from the amount paid every producer, one cent for each 100 pounds (or one cent for each 46 quarts) of milk actually purchased by them (with a proportionate charge being made for cream).
- (2) In addition to this sum the manufacturers or dealers or both, in the various cities, towns or communities, shall contribute to this publicity fund directly, the amount of one cent per hundred lbs. (or one cent per 46 quarts) for all milk purchased.

The moneys so contributed from producers, dealers and manufacturers, shall be turned over to the Allied Publicity Committee and be expended in equitable

amounts for the benefits of such towns, cities and communities contributing.

Headquarters and General Business

The headquarters of the publicity committee and its executive offices shall be in Philadelphia, Pa. Meetings of the committee shall be at the call of the chairman.

The committee shall hold monthly meetings, when reports of the executive officers, including the treasurer, shall be made and general business plans considered.

Special and Local Committees

Special and local committees may be special projects or to co-operate with the general committee in various cities and districts.

Everybody Must Co-operate

This is the biggest opportunity ever presented to the industry in this territory. It involves the complete absorption of the milk supply in the Philadelphia milk shed. Don't fail to note—

- (1) That this money will be contributed equally by producer and dealer or manufacturer and in proportion to amount of milk produced and purchased.
- (2) That every interest in, and every section of, the Philadelphia Milk Shed will serve to make individual advertising more effective.
- (3) That such a program will command the support of the various educational and humanitarian interests of the cities and states because it will be recognized to be along such broad lines that they can and will gladly co-operate.

In accordance with a resolution passed at the annual meeting of the Inter-State Milk Producers Association, December 6th, 1920, and printed in the report of that meeting, this plan becomes effective at once.

You will note that the receiving station price on the December schedule of the Inter-State Producers Association is quoted 1c per 100 lbs. below the actual calculated price based on the arranged price per quart f. o. b. Philadelphia. For instance, in the 50-60 mile zone the price for 3% milk would be \$2.69 per 100 lbs. based on 8 cents f. o. b. Philadelphia for 4% milk while the price quoted is \$2.68.

These funds have no connection with the commission due the Inter-State Milk Producers Association from its members, which is to be deducted and forwarded to that office in the usual manner.

The Philadelphia "direct shipped" schedule of the Inter-State Milk Producers Association does not have this deduction made thereon, and buyers will have to deduct 1 cent per 46 quart can, in making payment for the same and turn the amount so deducted over to the treasurer of the Publicity Campaign Committee.

Fruits are a source of supply for the protective substances—the so-called vitamins—more particularly the C-vitamins which is the corrective for scurvy—a disease found in latent form in infants.

Fruits, together with cereals and vegetables, furnish fibre needed to give bulk to the diet so that the food mass will move freely through the digestive tract and the waste products be thrown off from the body.

ANNUAL MEETING

(Continued from page one)

A proposition advocating that an effort be made to increase the consumption of milk was presented, and is printed in full elsewhere in this issue of the Review. After discussion the following preamble and resolution was presented and upon motion, unanimously adopted.

WHEREAS, The Inter-State Milk Producers Association has, at present, no adequate funds for a campaign to increase the consumption of milk and dairy products and

WHEREAS, The use of but a small additional amount of milk per capita would overcome seasonal excesses in production and stimulate and stabilize the market in general and

WHEREAS, A general campaign of education in the value of milk and its products as a food, is imperative to save the dairy industry, be it

RESOLVED, That the members of the Inter-State Milk Producers Association, in annual meeting assembled hereby authorizes its board of directors, in making arrangements for the sale of members milk, to apportion for advertising purposes one cent per one hundred pounds, (or 1 cent for 46 quarts) of the arranged price and that the price quoted by the Inter-State Milk Producers Association and publicly posted shall be the net price per hundred pounds or quart, after the amount subject to this arrangement, shall have been deducted.

A general discussion of the milk situation and price conditions followed, following which adjournment for lunch was taken.

Afternoon Session

Chairman Allebach called the meeting to order. President Frank P. Willits presented his annual report, which is printed elsewhere in this issue. Chairman Allebach then turned over to President Willits the chairmanship during the remainder of the meetings.

Dr. Clyde L. King, Milk Arbitrator for Pennsylvania, followed with an interesting address on "The Factors in Making a Milk Price."

Charles W. Holman, representing the National Board of Farm Organizations, outlined the work of that organization briefly and spoke particularly of the New Temple of Agriculture project, soliciting the support of the farmers for the same.

John A. McSparren, Master Pennsylvania State Grange, made a most interesting address on the subject of organization of farmers, which for their success, was, he said, an absolute necessity.

Annual Banquet

The second annual banquet of the association was held on Tuesday evening, at the Adelphia Hotel. Nearly 250 members and others identified with the industry and their ladies attended.

The following menu was served:

MENU

Chesapeake Bay Oyster Cocktail
New Jersey Celery California Olives
Snapper Soup
Maryland Style
Montgomery County Orange Sherbet
Roast Delaware Duckling
with Apple Sauce
Potatoes, a la Eastern Shore
Delaware County Green Peas
Chester County
Hearts of Lettuce
French Dressing
Philadelphia Ice Cream
Inter-State Coffee Fancy
Milk Cakes

Music by the Adelphia Orchestra
(Continued on page nine)

SECRETARY BALDERSTON'S ANNUAL REPORT

The books of the association show that the membership increased during 1920 from 10,538 to 12,358, representing a gain of 1920. This, however, does not represent the actual number of new members for the year as the 1919 total was considerably reduced by deaths, retirements from business, etc. The main difficulty in a further increase in membership has been the lack of local co-operation. Farmers have been too busy to give much time to organization.

Late in the year a field man, Mr. N. F. Gotshall, was added to our forces. It is hoped that the locals will use his services and make them effective through local co-operation.

Our membership is apportioned approximately as follows. Pennsylvania, 9,000; Maryland, 1,400; New Jersey, 1,400, and Delaware, 700.

We have 217 local organizations, representing an increase of 31 over last year.

We now sell approximately 780 dealers. The Milk Producers Review, our official organ, carries the message of your organization to you every month. If you do not get the Review it is an evidence of some error in your post office address.

Financial Statement

The following is an itemized statement of the financial operations of the association during the year 1920, together with a comparison of our finances one year ago.

Total assets, December 1, 1920
Cash \$ 1,029.28
Savings Fund Account..... 3,410.87
U. S. Bonds, par..... 4,500.00
Office Furniture and Mdse... 2,852.70

Total \$11,792.85
Assets, 1919..... 10,655.24

Increase in net worth... \$ 1,137.61

Inventory, December 1, 1920... \$2,552.70
Inventory, November 30, 1919... 1,078.40

Net increase in value..... \$1,774.30

BURN GARDEN REFUSE TO KILL INSECTS AND DISEASE

Clean up the back yard or vacant lot by burning all the dead foliage.

While the dead foliage may be turned under and may add valuable humus to the soil for next year, yet the garden refuse, the stalks, leaves, roots and rotten fruits and vegetables are not as dead as they seem. Their own natural life is ended but they often bear about them the insects that have been pests in the garden, or their eggs and these will live over winter in the old plant remains, to resume their activities next spring.

Not only do insects live over in this manner, but many fungus parasites which infect the garden in summer leave their spores or other reproductive parts on the dead stalks, roots and leaves and these will pass the winter there and start up fresh and vigorous when the new crop begins to grow next spring. Digging under garden refuse may reduce these insects and fungi to some extent, but only the good, old reliable bon-fire can be depended upon to make a satisfactory finish of them.

Morris Darlington, operating the Doe Run, Pa., condensary and butter factory has sold the plant to Albert Hoopes, of the Highland Farms Dairy, West Chester, Pa.

When old drink milk to keep well.

WEIGHING VERSUS MEASURING IN MILK BUYING

The accuracy of buying or selling milk by volume or measure, instead of by weight has been frequently questioned. Many milk producers have been opposed to selling milk by weight, having long been accustomed to sell on the measured basis.

The farmer should receive full credit for his milk shipped, but the aim should be to use a system that is accurate and fair to both buyer and seller. Naturally, the dealer does not want to pay for more milk than he receives and the farmer wants to receive payment in full for what he shipped.

Statistics recently compiled, exhibit Animal Industry recently, exhibit some interesting data in this connection.

Observations were made on a total of 346 shipments of milk consisting of 1102 cans. The cans of milk were examined on arrival at the plants before they were dumped into the weigh cans. The quantity of milk by measure in cans that were not full was estimated by means of measuring sticks, so that regardless of the quantity shipped by the producers and the amount lost before the milk reached the plants, an accurate check was made upon the fullness of the milk cans before they were emptied into the weigh cans. The table below shows the difference between the quantity of milk dumped, as determined by can measure, and the actual quantity received, as shown by the scales.

No. of cans	Quantity according to gallons	Actual can measure weight pounds	lbs. based on 8.6 lbs. per gal.
1102	6185.32	521.910	6068.72

This shows a loss of 116.60 gallons or 1.88 per cent. by the measured cans method. This difference was no doubt primarily due to the poor cans that were used. It cannot be expected that dented and battered cans will hold their rated or full stick measured quantity.

One shipment of six full cans, supposed to hold 30 gallons, held, it is stated, only 28 3/4 gallons as shown by weight.

In justice to the farmers shipping milk to plants where milk is bought by weight, they should see that the scales are tested for accuracy from time to time and that the milk should be well drained from the cans on emptying into the weigh tank.

START INSPECTION OF ALL LICENSED OLEO PLACES

The field agents of the Bureau of Foods, Pennsylvania Department of Agriculture, at a conference held recently, were instructed by Director James Foust, of the Bureau, to at once start a thorough canvass and inspection of all stores and wholesale plants holding licenses for the handling of oleomargarine.

During 1919 there were 5,788 oleo licenses issued in the State and from January 1, to October 7, 1920, there were 5,982 licenses issued, indicating that 1920 will show an increase of approximately 500 licenses.

With the price of butter mounting higher, as cold weather approaches, the demand for oleomargarine is showing the usual increase and the State-wide inspection was ordered to make sure that all the dealers in oleo are strictly complying with the law and that the consuming public is adequately protected.

Read the advertisements—keep posted on money saving propositions.

MILK GRADING SHOULD MEAN SOMETHING

Milk grading, properly conducted, is an advance step in dairy sanitation. Where an efficient grading system is in operation, consumers may select the class of milk which they desire and for which they are willing to pay. The health department is also aided in its efforts to inform consumers where milk of the highest quality may be secured. In addition, those dairymen who, by additional care and expense, produce a high grade product are rewarded by greater financial returns.

Along with its advantages, milk grading puts great responsibility on the health department. For this reason, the matter should be carefully studied by administrative officials before such a system is adopted. No grading system should be considered which includes any milk not perfectly safe for human consumption. The lowest grade should be safe milk.

In planning a grading system, resolve to have only a very few, clearly defined grades. A multiplicity of grades increases the work of administrative officials and causes confusion in the minds of consumers. Ordinarily three grades will suffice—grade A raw, grade A pasteurized and grade B pasteurized. Certified milk may be included in grade A raw; or it may be sold under its own title. The distinction should be so clearly made that there will be no doubt that grade A milk is better than grade B milk.

Unfortunately some cities have passed grading ordinances without having sufficient funds or personnel for proper enforcement. This has resulted in unfortunate confusion. So-called grade A milk has been sampled which was of lower quality than grade B milk. Where such a condition prevails, it would probably be better to have no grading system at all. Especial care must be taken where a milk plant handles two different grades of milk. Strict precautions must be observed to make sure that the two grades do not become mixed or that one grade is not substituted for a higher grade. In such plants it is better to require that the highest grade be handled first in order that it may pass through the equipment before the lower grades.

In spite of the difficulties attending the operation of milk grading, such a system is desirable; but the system must be workable and capably enforced. If poor milk is allowed to masquerade under the title of grade A, the public will be imposed upon, and its confidence in the system shaken. The milk producer, dealer and consumer will suffer, and the reputation of the health department will not be enviable.

Health Officer Letter No. 42,
Department of Agriculture.

A rank growth of weeds becomes an asset when plowed under before they make seed.

HAS GOOD VOICE

A recent advertisement reads as follows: "Wanted—A steady, respectable young man to look after a garden and care for a cow who has a good voice and is accustomed to singing in the choir."

We have always been opposed to attempting to breed dual-purpose cattle, but perhaps we will have to modify our views, for we see no objection to breeding cows with good voices and capable of singing in a choir.—Hoards' Dairyman.

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"Entered as second-class matter, June 8,
1920, at the post office at West Chester,
Pennsylvania, under the Act of March 3,
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Editorial

There has been a general collapse in practically all food prices. Meat prices have reached new low levels. The grain trade has been through one of the most drastic liquidations in its history. Wheat at the recent low point had dropped \$1.23 from the high of the season for December delivery. Oats prices reached the lowest since 1916. Estimates have been made that prices have lost at least one-third of their war time inflation. It's a buyers market throughout and forced sales have been made at what might be termed ruinous prices.

While the milk market has been weak for some time and very much unsettled, owing to the discontinuance, to a large extent, of the manufacture of condensed and evaporated milk, the actual break in prices for fluid milk did not set in until quite recently. From east to west, north to south, there has been a general downward tendency in milk prices—and universally, the consumer has had practically all the benefit of the reduction while the producer has had to assume the burden of the decline, the usual process when the buyer is in the saddle.

For several months there has been an insistent demand on the part of the public for lower food prices. In many instances buying, beyond actual needs, has been at a standstill. Cost of production does not interest the consumer—it is a greater buying power of the dollar that is of prime interest to him.

In practically all lines stocks of manufactured goods have been steadily accumulating. For a time manufacturers continued to produce at high costs, then some curtailments were made, small at first but gradually expanding. Labor became less fully employed and ultimately their buying power decreased.

In the milk industry curtailment of production is not so simple a proposition. Milking cows can not be laid off like so many employees. The milk flow must go on. During this fall milk continued to be produced at the war time rate and in view of conditions, could not be absorbed in the usual channels. Consumers have not been educated to

unusual consumption. Condensaries restricted manufacturing and in instances, stopped entirely; but the milk flow, favored by weather conditions continued almost without any sign of decrease.

In certain sections of the country price recessions were observed in September and became more extended in October. November and December saw more general and more drastic recessions. In late November there was a weakening in practically all of the stronger markets. This was largely due to under cutting with low price milk which came into the local market from outside weaker markets.

This condition gradually affected all of the primary milk markets and the meeting of this low price competition became necessary if the industry was to be maintained on a sound basis.

Price reductions for market milk ranged, in various sections, from one to two cents a quart. In some districts prices for milk for manufacturing purposes showed a still further recession.

A reduction of two cents a quart in the price of market milk was thought best, first in order to compete with low price milk which was coming into the market from outside sources and second, because at the lower price, a greater consumption was to be expected, and third, it is believed that on this basis a business can be established which will take care of production at the price level named, for some time ahead.

Business is evidently in a period of readjustment. This was to be expected. War time prices were not built on a solid business foundation. The exigencies of the occasion demanded production. Cost was of secondary consideration. Every producer was spurred to maximum output. Capacity grew apace, far in excess of normal needs.

With the end of the war we had capacity and decreasing consumption. Foreign countries had been tremendous buyers of food stuffs. Exports were enormous. In the readjustment following the war foreign exchange was at its lowest level. As far as buying power is concerned, the exchange rates today practically prohibit export trade. American producers were deprived of their best markets. Readjustments were absolutely necessary—sooner or later they had to come.

Many hoped that the adjustment of prices downward would be gradual so that business would not be seriously affected. Evidently such a plan was impossible.

The reaction has set in and probably, of all primary producers, the farmer suffers the greatest. Business on the whole must be readjusted. A solid foundation, one on which business can be built on a normal basis, must be provided. It is going to hurt—does hurt now. The process is a severe one, but must be endured. Some will fall by the way-side, others will survive. It will be necessary for every one to keep their eyes and ears open—keep their feet on the ground, watch conditions carefully and build wisely.

Co-operation of the strongest kind will be necessary to bring about the best results in the up-building. We need careful, intelligent council in this work. Farmers will have to bear some of the burdens—but not all. Co-operative efforts alone will best look after the farmers interests, but it will require all that the word co-operation means to get results.

Stand by and stand by firmly, take council before acting and think fully and carefully on every project before final action is taken. It's for the future that the business plan must now be builded.

BALTIMORE MILK SITUATION

The price of milk in Baltimore was reduced one cent a quart to the consumer and five cents per gallon to the producer. The retail price of pint bottles was also reduced one cent. The price the farmer will receive for his milk during December is thirty-four cents (34c) per gallon for 4% milk, with the usual differential of 1/2 cent per gallon for each 1/10% butter fat above and below this standard. Milk on the street will be sold for fifteen cents per quart and nine cents per pint.

The reduction of the price of milk during December is very unusual as this month generally commands the highest price, but in order to maintain the market it was thought best to make the reduction now, hoping to maintain the same price during the winter.

Fortunately for the dairymen, feed prices are on the decline, and to those who have not laid in their winter supply at the high prices, the loss of producing milk this month will not be so great. All fed which was purchased last fall will not have to be fed at a loss. The only way we can hope to break even in the dairy business is to have an average price for the twelve months, which will cover the cost of production.

The supply of milk on this market is still greater than the demand, and unless these conditions change we cannot hope for a higher price for our milk this winter. Indeed, we will be fortunate if we can maintain the present price.

We expect to put on a campaign of advertising in the near future which we hope will aid in increasing the consumption of milk in Baltimore, and in this way reduce some of the surplus now on the market.

D. G. Harry, President Maryland
State Dairymen's Association.

ASSOCIATION ACTIVITIES

Do you know how the time of the officers and executives of the Inter-State Milk Producers Association is employed?

It may interest you to know that the directors of your association had one meeting in November to consider ways and means of meeting the complex situation in the milk industry.

That your executive committee had two formal and numerous informal meetings during the month.

That there were eight important conferences in the association offices between groups of producers and the buyers of their milk, to adjust differences.

That the milk supply of 52 members of the association was taken care of by placing same with new buyers.

That officers or representatives attended seventeen meetings of locals throughout the territory during November, making addresses and adjusting minor difficulties.

That twelve locals invited the attendance of officers, which they were not able to attend owing to their time being taken up at other meetings.

That your officers have attended several meetings to discuss proposed State legislation and to protect the interests of the dairyman.

The foregoing represent the leading activities of the month, in addition to which are the many routine duties delegated to the various executives.

COMMISSIONS

We would call the attention of such of the members of the Inter-State Milk Producers Association, whose commissions are not regularly deducted each month, by the dealers and manufacturers buying their milk, and thus paid over to the association, that the regular bills for the amount of their commissions for 1920 will shortly be mailed from the association office.

If the bills, when received, do not appear to be in accordance with your accounts, kindly advise us.

We should also appreciate a prompt remittance against these bills when received.

One of our advertisers writes us in part, as follows:

"I thought you would be interested in knowing that we have received a number of replies in response to our advertisement in the Inter-State Milk Producers Review."

Evidently, "It pays to advertise in the Review."

CO-OPERATIVE ORGANIZATIONS TO RECEIVE SPECIAL ATTENTION

The development of co-operative associations among the farmers of Pennsylvania will receive special attention from the Pennsylvania Department of Agriculture during the coming winter. Secretary of Agriculture, Fred Rasmussen, has announced the appointment of Howard A. Macrae as assistant in co-operation, in the Bureau of Markets, and Mr. Macrae will have charge of the co-operative organization work throughout the state.

Mr. Macrae comes to Pennsylvania from Massachusetts, where he was manager of the Hampden County Farmers' Exchange. Previous to that time he was employed as county farm agent in Rhode Island.

There are 150 co-operative organizations among the farmers of Pennsylvania at the present time, a majority of these having been organized for the purpose of handling and disposing of the crops of the members. Many of these organizations have been formed under the recently enacted law which affords greater advantages to farmers desiring to market their crops collectively.

During the Fifth Annual Farm Products Show, to be held in Harrisburg, January 24-28, a meeting of the managers of the various co-operative organizations in the state will be held, at which time problems of organization, financing and management will be taken up.

APPLE WOOD IN DEMAND BY TOOL MANUFACTURERS

Farmers who contemplate cutting down apple trees for one reason or another, should carefully preserve the wood, as their is an unusual demand for it at this time.

Apple wood is used largely for the making of saw handles by tool manufacturers and is also used as a substitute for sweet-briar in the manufacture of smoking pipes. So scarce is the supply at this time that one large tool manufacturer is planning to send a force of woodsmen out in an effort to secure worn out apple trees or trees that are bearing fruit for which there is no demand.

LATEST MARKET PRICES

December Milk Prices

Subject to change whenever warranted by market conditions

F. O. B. Philadelphia

From these prices one cent per 46 quarts (or one cent per 100 pounds) is to be deducted by the buyer, which together with one cent per 46 quarts, contributed by the buyer, is to be turned over to the treasurer of the Advertising Campaign Committee for the purpose of carrying on a publicity campaign, advertising the food value and greater consumption of dairy products. The usual commission from the members of the Inter-State Milk Producers Association is to be deducted and returned to the Association as heretofore.

Test	Price	Price
Per cent.	100 lbs.	per quart
3.7	\$3.28	7.1
3.1	3.32	7.2
3.2	3.36	7.3
3.3	3.40	7.4
3.4	3.44	7.5
3.5	3.48	7.6
3.6	3.52	7.65
3.7	3.56	7.7
3.8	3.60	7.8
3.9	3.64	7.9
4.0	3.68	8.0
4.1	3.72	8.1
4.2	3.76	8.2
4.3	3.80	8.3
4.4	3.84	8.35
4.5	3.88	8.4
4.6	3.92	8.4
4.7	3.96	8.6
4.8	4.00	8.7
4.9	4.04	8.8
5.0	4.08	8.9

When the milk is not tested the price, f. o. b. Philadelphia is 8 cents per quart

RECEIVING STATION PRICES

Less Freight and Receiving Station Charges
From this date quotations will include a deduction of one cent per 100 pounds which, amount, together with one cent per 100 pounds, contributed by the buyer, is to be turned over by each buyer to the treasurer of the Advertising Campaign Committee for the purpose of conducting a publicity campaign, advertising the food value and greater consumption of dairy products. The usual commission from the members of the Inter-State Milk Producers Association is to be deducted and returned to the Association as heretofore.

Miles	Freight Rates of 46 quarts, 113% of 100 lbs. plus 3% war tax	Basic Quantity Price per 100 lbs.
1 to 10 incl.	.27	\$2.77
11 to 20 "	.285	2.75
21 to 30 "	.308	2.73
31 to 40 "	.32	2.72
41 to 50 "	.34	2.70
51 to 60 "	.355	2.68
61 to 70 "	.369	2.67
71 to 80 "	.38	2.66
81 to 90 "	.396	2.64
91 to 100 "	.408	2.63
101 to 110 "	.418	2.62
111 to 120 "	.43	2.61
121 to 130 "	.44	2.60
131 to 140 "	.456	2.58
141 to 150 "	.466	2.57
151 to 160 "	.48	2.56
161 to 170 "	.488	2.55
171 to 180 "	.50	2.54
181 to 190 "	.508	2.53
191 to 200 "	.52	2.52
201 to 210 "	.53	2.51

Freight rates deducted on a basis of 46 quarts—113 per cent. of 40 quarts, plus 3 per cent. war tax. Four-tenths of a cent added or deducted for each tenth of one per cent. butterfat above or below 3 per cent.

MONTHLY PRICES OF GRADE B OR MARKET MILK

	F. O. B. Philadelphia and at receiving stations in the 50 mile zone, at 3 per cent. butterfat. Four cents being added or deducted for each one-tenth per cent. fat above or below 3 per cent.	Receiving station 50 mile zone per cwt.
January	8.1	3.21
February	8.1	3.21
March	8.1	3.21
April	8.1	3.21
May	8.1	3.21
June	8.1	3.21
July	8.1	3.21
August	9.1	3.67
September	9.1	3.61
October	9.1	3.61
November	9.1	3.61
December	8.1	2.68

SURPLUS BASIS PRICES

4 per cent. milk at all receiving points

	First half	Average
January	\$3.16	\$3.15
February	3.20	3.18
March	3.14	3.19
April	3.38	3.42
May	2.90	3.00
June	2.71	2.76
July	2.76	2.76
August	2.61	2.64
September	2.78	2.81

These prices are based on 120 per cent. of the average monthly or semi-monthly price of solid packed 92 score creamery butter, New York City. In May, June and July an increase of 10 per cent. and in August an increase of 5 per cent. in the basic quantity of milk shipped is allowed.

DECEMBER COMPARATIVE PRICES PAID PRODUCERS FOR MARKET MILK

	Eastern Territory
4 per cent. butter fat, per 100 pounds	
Philadelphia, 50 mile zone	\$3.08
New York, 200 mile zone	3.14
Pittsburgh, outlying points	3.75
Baltimore, per gallon f. o. b.	.34

DECEMBER RETAIL MILK PRICES

Pasteurized and bottled
Subject to Board of Health Regulations
Grade B or Market Milk

	Quarts	Pints
Philadelphia	13	0
New York	16	0
Baltimore	15	9
Pittsburgh	16	10

November Milk Prices

Subject to change whenever warranted by market conditions

F. O. B. Philadelphia

Test	Price	Basic Quantity Price per quart
Per cent.	100 lbs.	
3.1	\$4.20	9.1
3.2	4.24	9.2
3.3	4.28	9.3
3.4	4.32	9.4
3.5	4.36	9.5
3.6	4.40	9.6
3.7	4.44	9.65
3.8	4.48	9.7
3.9	4.52	9.8
4.0	4.56	9.9
4.1	4.60	10.1
4.2	4.64	10.2
4.3	4.68	10.3
4.4	4.72	10.35
4.5	4.76	10.4
4.6	4.80	10.5
4.7	4.84	10.6
4.8	4.88	10.7
4.9	4.92	10.8
5.0	4.96	10.9

When milk is not tested the price, f. o. b. Philadelphia is 10 cents per quart

RECEIVING STATION PRICES

Less Freight and Receiving Station charges

Miles	Freight Rates of 46 quarts, 113% of 100 lbs. plus 3% war tax	Basic Quantity Price per 100 lbs.
1 to 10 incl.	.27	\$2.77
11 to 20 "	.285	2.75
21 to 30 "	.308	2.73
31 to 40 "	.32	2.72
41 to 50 "	.34	2.70
51 to 60 "	.355	2.68
61 to 70 "	.369	2.67
71 to 80 "	.38	2.66
81 to 90 "	.396	2.64
91 to 100 "	.408	2.63
101 to 110 "	.418	2.62
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171 to 180 "	.50	2.54
181 to 190 "	.508	2.53
191 to 200 "	.52	2.52
201 to 210 "	.53	2.51

Freight rates deducted on a basis of 46 quarts—113 per cent. of 40 quarts, plus 3 per cent. war tax. Four-tenths of a cent added or deducted for each tenth of one per cent. butterfat above or below 3 per cent.

NOVEMBER BUTTER PRICES

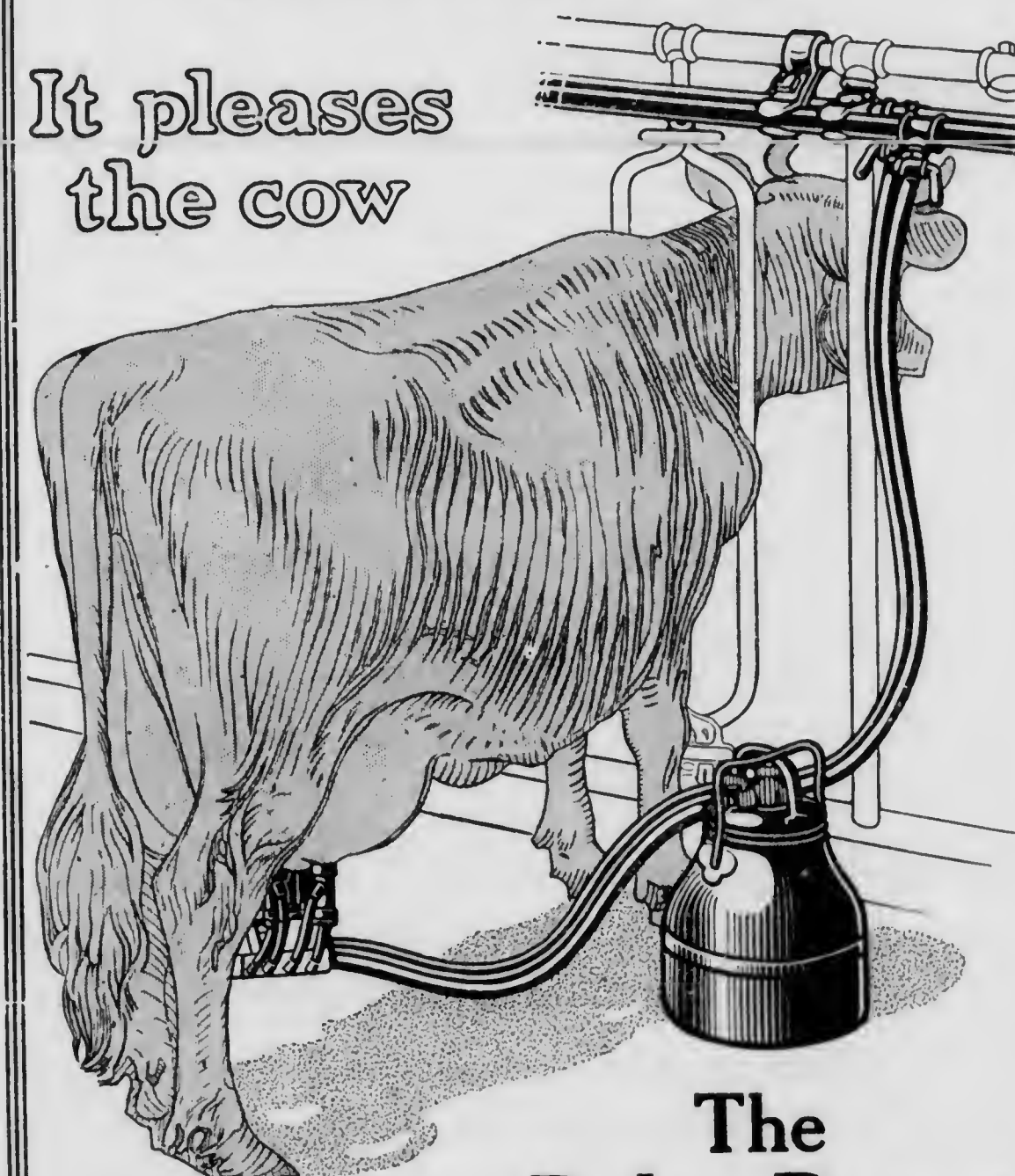
92 score solid packed creamery butter, cents per pound

	New York	Phila.	Chicago
1	62	62 1/2	61 1/4
2	63	62 1/2	61 1/2
3	63	63	61 1/2
4	64	63	61 1/2
5	64	64 1/2	62
6	64	64	62 1/2
7	64	64	62 1/2
8	64	64	62 1/2
9	64	64	62 1/2
10	64	64	62 1/2
11	64	64	62 1/2
12	65	64	62 1/2
13	65	64	62 1/2
14	65	65 1/2	62
15	65	65 1/2	61
16	65	65 1/2	61
17	65	65	61
18	65	65	61
19	65	65	61
20	65	65	61
21	65	65	61 1/2
22	65	65	61 1/2
23	65	65 1/2	62 3/4
24	65	68 1/2	64
25	66	61	54
26	66	61	54
27	67	61	53
28	67	61	53
29	67	61	53
30	67	61	53

On account of the high price of coal there will probably be a large amount of wood used as fuel next winter. Use all the waste timber, dead and dying trees for this purpose, and be sure to conserve the ashes for garden fertilizer. They are rich in plant food, particularly potash.

The De Laval Milker

It pleases
the cow

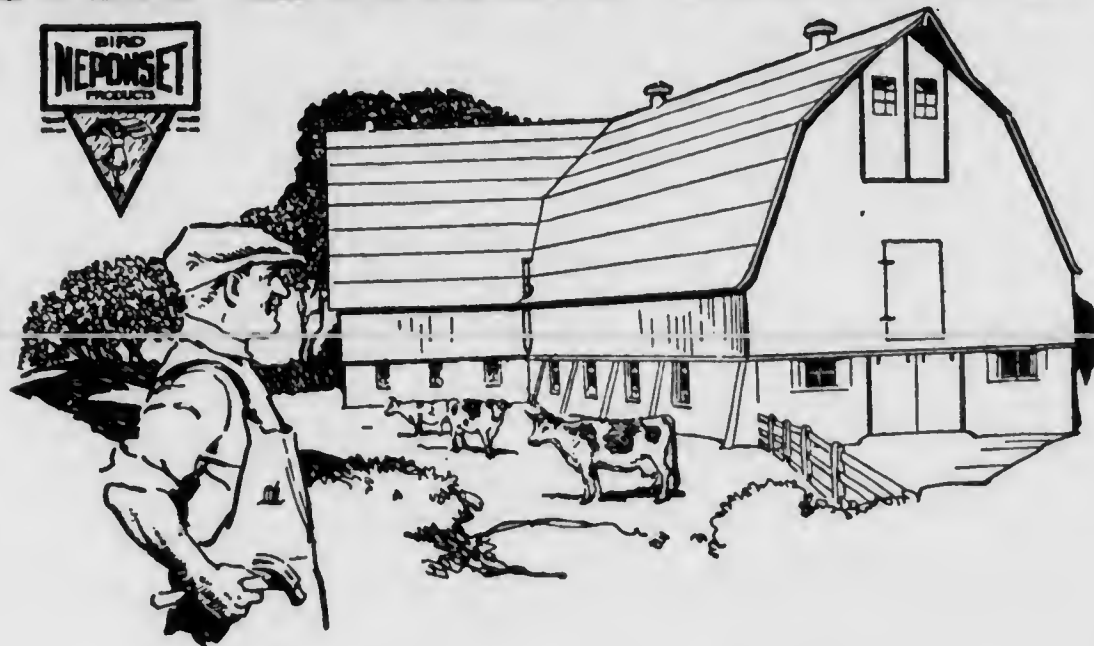


The Pulso-Pump

(The Pulso-Pump is not shown in the part of the Milker installation pictured above. It is connected with the power in any convenient part of the barn)

The De Laval Pulso-Pump produces the vacuum which draws the milk from the cows, and it also controls the action of

NEPONSET ROOFS



In the long run Bird's
Neponset Paroid is the cheapest
roofing to use

Twenty years without a single repair
is not an unusual record for a Paroid
Roof.

That's why we say that Paroid is
the cheapest roofing to use.

Paroid comes in natural gray. Every
roll complete, with nails and cement.
If your dealer does not carry Paroid we
will ship direct to you.

Bird & Son, inc. (Established 1795) East Walpole, Mass.



It takes time to mix special feeds and in the
absence of the most careful selection and
tests you can't be sure of the ingredients. Let

us take the trouble off your hands and give you a *certainty*!
For 17 years Union Grains has been made to the same splendid formula.
Hundreds of dairymen—feed experts themselves—have tested it against the
best of home mixed feeds—and then adopted Union Grains for good! They
know it pays!

For the man who appreciates the good business of feeding good feed to good
stock and who has plenty of other work to do Union Grains is a God-send!
Try a load now!

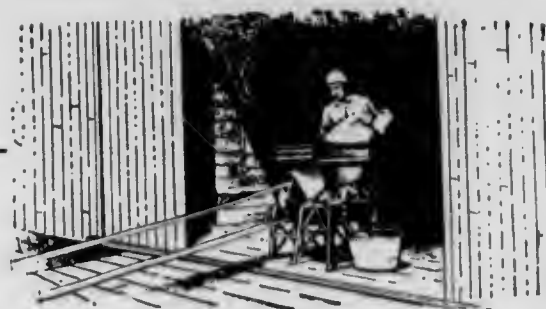
Ask for a Union Grains Cost Sheet. It will show you where your
profit comes from, and help you spot the "boarders" in your herd.

Other Ubiko Products: Ubiko Stock Feed, Ubiko Buttermilk
Egg Mash, Ubiko Buttermilk Growing Mash, Ubiko Pig Meal. 10

THE UBIKO MILLING CO., Dept. I Cincinnati, Ohio



MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS



International Feed Grinders

Will save you 12 to 26% of your stock feed, because
it is more readily converted into milk and energy. An
International engine or tractor will greatly assist you in
power grinding.



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Consulting and Analytical Chemists
Complete Chemical and Bacteriological Analysis of Milk, Dairy Products,
Foods and Waters

FLY SPRAY TO KEEP FLIES OFF DAIRY CATTLE

Chlorine Solution to Sterilize Milk Utensils Write for information
Dr. Lee H. P. Maynard, Milk Expert H. C. Campbell, B.S., M.D., Ph.G., Chemist
Dr. H. S. Johnson, Bacteriologist Ralph Fort, Assistant
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INTER-STATE

Milk Producers Review

Inter-State Milk Producers Assn., Inc., Publishers
24 East Market St., West Chester, Pa., and
720-722 Heed Bldg., Philadelphia, Pa.

I hereby subscribe to the Inter-State Milk Producers Review, at
the rate of 50 cents per year, in advance.

Signature.....

Date..... P. O. Address.....

Member..... Local.....

REPORT OF COW TESTING ASSOCIATION

Name of Association, Avondale-West Grove. Month, November, 1920. Re-
ported by Thomas C. Y. Ford, Honeybrook, Pa. Herds tested, 20; cows in milk,
260; cows dry, 48; No. cows sold; profitable, 2; unprofitable, 14; No. purebred
bulls purchased, 1; No. replacing grade cows, 9; No. cows producing over 40 lbs.
fat, 12; over 60 lbs. fat, 2; No. cows producing over 1,000 lbs. milk, 20; over 1,200
lbs. milk, 3.

Ten Highest Producing Cows in Butterfat for Month

Owner	Breed of Cow	Lbs. Milk	% Fat	Lbs. Butterfat
James Barrow	Durham	2054	3.2	65.7
S. G. Brosius	Guer.	854	6.0	51.2
Hoagland Gates	Hol.	1207	4.0	48.3
A. M. Souders	Guer.	1044	4.4	45.9
Hoagland Gates	Hol.	1110	4.1	45.5
D. D. Bettinger	Hol.	1296	3.5	45.4
Dr. J. A. Webb	Hol.	1085	4.0	43.4
J. W. Passmore	Hol.	1134	3.8	43.1
Hoagland Gates	Hol.	1062	4.0	42.1
B. F. Hickey	Hol.	1177	3.5	41.2

President Willits Address

(Continued from page two)

Comparison of Prices for Milk and for Other Farm Products

Corn, December 4th, 1919 was \$1.70
now \$1.00, a reduction of 41.93%.

Potatoes per cwt., December 4th, 1919
were \$2.75 now \$1.75 a reduction of 37%.

Wheat, December 4th, 1919 was \$2.36
now \$1.85, a reduction of 21.43%.

Oats, December 4th, 1919 was \$.88 now
\$.60, a reduction of 42%.

Cattle, December 4th, 1919 was \$16.50
now \$12.00, a reduction of 28%.

Hogs, December 4th, 1919 was \$14.75
now \$11.00, a reduction of 25%.

The average reduction of all these in
price is 32.56%. In the same the farmers
milk price has been lowered but 11%.

The following are the comparative
prices for 4% milk f. o. b. Philadelphia
for the past 5 years:

1916	1917	1918	1919	1920
53c	7c	10c	9c	10c

Labor

It is true, labor costs on our farms
continues as high as at any time during
the war, and at the same time the supply
has been inadequate. On the other hand
there is much unemployment in our
cities and employers here in Philadel-
phia are re-employing a better grade of
labor at lower rates. Surely this move-
ment will react to our farmers advan-
tage by another year. Enough able-
bodied men must have felt the pangs of
hunger by that time to be willing to re-
turn to their former places and help
produce that which they could eat, re-
lieving our women and old men and boys,
who have continued to furnish the bulk
of our farm labor.

National Activities

During the year just closed, the of-
ficers of the association have taken an
active part in promoting the interests of
its members in a national way. I have
twice represented the association at the
annual meetings of the National Milk
Producers Federation, first in 1919 at the
December meeting and then the past
October. During this time I have
served as treasurer of that organ-
ization. We have taken an active in-
terest in, and rendered, I trust, substan-
tial assistance to the milk producers of
New Orleans, who have had the mis-
fortune to be the first milk organization
prosecuted under the terms of the so-
called Sherman Act, an experience which
might just as readily have come to us.
We are, therefore, hoping to press more
vigorously than ever for a clearer defi-
nition of a legal farmers organization
through the passage of the Capper-
Hersman bill by the next Congress. We
are supporting the National Board of
Farm Organizations through the Na-
tional Milk Producers Federation and
also through the participation of our
officers on its committees. We urge our
members to back the campaign for the
"Temple of Agriculture Fund as fully
as possible.

The Milk Producers Review

With the December issue, our monthly
paper completes its eighth issue. We
feel it has proven its value and we have
no apologies to offer, though we invite
constructive criticism at all time. It
covers a much broader field than our
former monthly letter and ultimately
will not cost much, if any more. We
are very fortunate in having found in
Mr. A. A. Miller, one within our own
membership who is fitted by personality,
training and experience to act as busi-
ness manager and editor. Mr. Miller
has been untiring in his effort to make

it a success and the officers have appre-
ciated his cheerful co-operation, and his
genial presence is a decided asset in
the executive offices.

We trust that each member receives
the paper every month, but does not let
it lie on the sitting room table, unopened,
until friend wife throws it out to make
room for the next copy. Read it, even
if you are tired and sleepy at night.
Keep in touch with your fellow mem-
bers and your markets through your
official organ.

New Field Man

Mr. Gottshall has, during the year, be-
come a regular employee of the associa-
tion as an organizer and tester. He is
at the service of the members and will
endeavor to apply his time in strength-
ening the organization and adjusting mis-
understandings.

Sale of Dr. King's Book

The association has taken over the
agency for the sale of Dr. King's book
"The Price of Milk," for our members.
No one has attempted to treat this sub-
ject before and Dr. King has handled it
in a way that makes it very valuable to
every milk producer. We want each
member to buy it and read it, so as to
understand the factors that enter into
the question of securing an adequate
price for milk.

Acknowledgments

You will remember that the secretary
of the association, Mr. R. W. Balderston,
was, one year ago, given leave of ab-
sence for six months for relief work
abroad. He returned to the office about
August 1st. In his absence the vice
president, Mr. H. D. Allebach, tempo-
rarily assumed the duties of the secretary
as well as his own. I wish here to give
public expression to my appreciation of
the untiring efforts of that cheerful gen-
tleman, whose efforts did more than
any of you can realize to keep our
markets in good, healthy, comfortable
condition during the trying months of
this year.

We are glad to have shared through
Mr. Balderston in the world wide relief
work headed by Mr. Hoover, but we
welcomed him back August 1st, when
he again took up his usual duties and
responsibilities.

Arrangements have since been made to
allow him also to serve as secretary and
manager of the publicity campaign, to
which I wish to refer next.

Advertising Plan

The directors of the association have
approved a far-reaching advertising plan
to educate our public to the food value
of dairy products and to increase their
consumption. This matter will claim
our further attention during these meet-
ings, particularly at the session tomor-
row. But I might say in passing that
I was greatly impressed with the recent
comment of Mr. Munn, of Chicago, that
the use of an additional 2 tablespoons-
ful of milk by each consumer would use
up all our present surplus. From per-
sonal observation covering our member-
ship, we are forced to believe that city
people are not the only ones who need
this kind of propaganda. Our farmers
do not serve milk at their own table as
freely as they should nor do all of them
use butter instead of oleomargarine.

Conclusion

We do not know what is ahead of us.
But we must go forward. The past four
years have seen many advances in the
practice of collective bargaining by
farmers. We have learned how to give
permanency and stability to our co-op-
erative institutions. We hope to con-

HARDER SILOS

Silage keeps best in a Harder

It settles closely and evenly because of the
smooth wood inside. It keeps perfectly because
the walls are absolutely air-tight and because the
wood staves are the best non-conductors of heat.
That means no chilling or freezing—no escape of
heat—no acid condition in the silage.

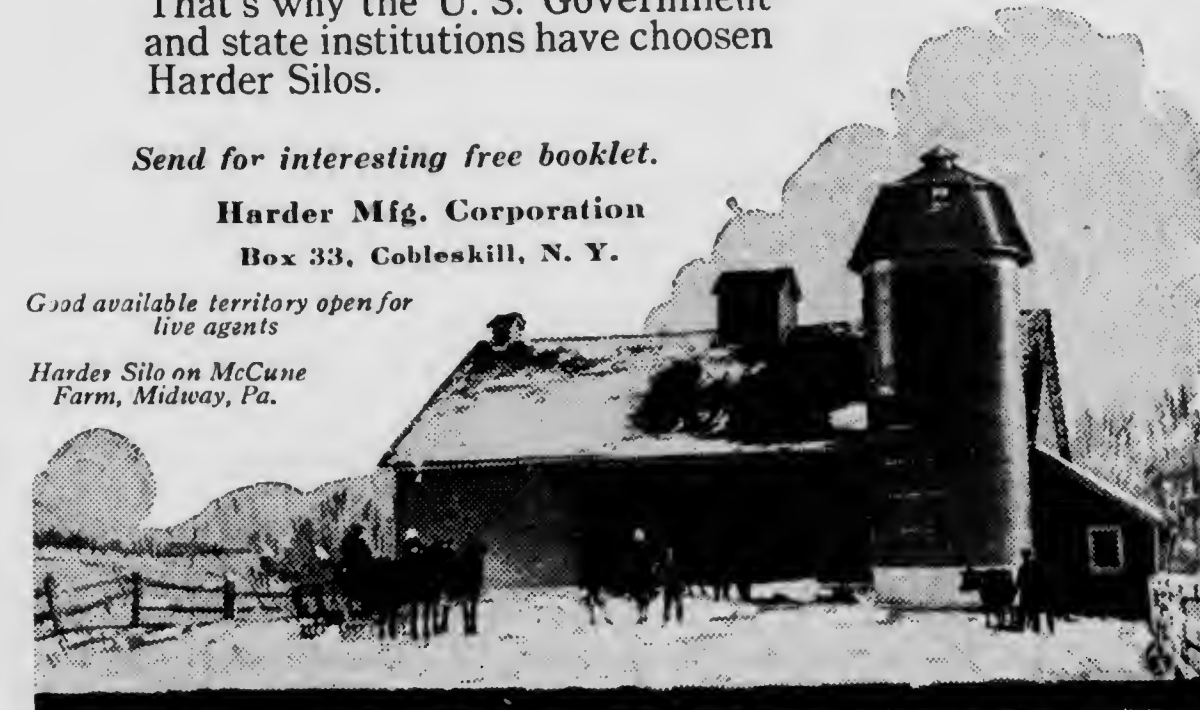
Harder silage is best for cows—best for milk.
That's why the U. S. Government
and state institutions have chosen
Harder Silos.

Send for interesting free booklet.

Harder Mfg. Corporation
Box 33, Cobleskill, N. Y.

Good available territory open for
live agents

Harder Silo on McCune
Farm, Midway, Pa.



UNITED STATES
CREAM SEPARATOR
WITH PERFECTED DISC BOWL

World's
Record
Skimming

Inter-
changeable
Discs
Easy bowl
to clean

So easy to clean

Milking done; the separator run
finished—what then?

Either a mussy, fussy period of washing
up and re-assembling—or a quick, sani-
tary wash-up that's a matter of mo-
ments.

---Depends entirely on how wisely
you've selected your separator.

The Perfected Disc Bowl of the United
States takes the drudgery out of the
clean-up. No chance to get the discs
mixed; they're interchangeable. Just
slip them on the handy disc transfer—
at one stroke—wash in warm water,
rinse in boiling water, and the job's done.

The United States is a Separator you
can live with in peace.

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time to care for our markets through
the policy of co-operation with distribu-
tors, manufacturers and consumers under
the wise adjustments and decisions of
Dr. King, Milk Arbitrator for Pennsyl-
vania. But to do this we may need to
develop some new marketing agencies
in parts of our territory. The future
only can tell. Forget, if you will, every-

thing else I have said today, but re-
member this one thing, which we all
believe to be true, and which I have
said, I think, each year, that this or-
ganization will fail or succeed just in
that measure it fails or succeeds to get
the active, loyal support of every milk
producer. Even membership in the as-

(Continued on page eight)

Beef Your Poor Cows Now

Your good cows have been paying the keep of your boarders long enough.

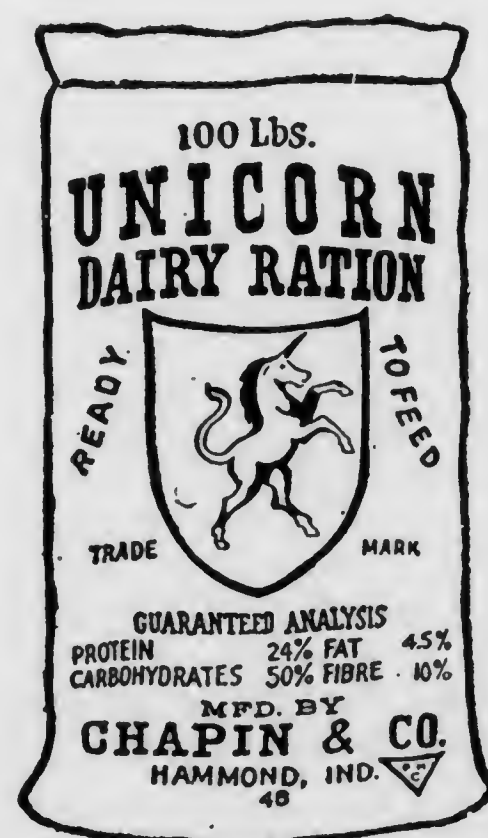
Beef the boarders. Your reduced herd, fed Unicorn, can produce as much as the whole herd did before.

At less cost for feed and roughage.

When your cows freshen, start right by feeding Unicorn. They will maintain a maximum production for a longer lactation period than ever before.

Good cows, fed Unicorn, always make a profit.

CHAPIN & COMPANY
Chicago



Traverse City (Mich.) State Hospital herd of 78 milking cows, fed Unicorn, averaged 13,669 lbs. during 1919



Every Mouthful Makes Milk

International Special Dairy Feed is a concentrated milk-making ration. Higher milk production must follow when this feed is properly used. Balance your hay and silage or home-grown grains with

INTERNATIONAL SPECIAL DAIRY FEED

It is a highly palatable and digestible molasses feed. Feed International Special Dairy Feed in accordance with directions and you can increase the milk production of any cow in your herd from 60 to 100 gallons during a 6 months' period as compared to results from using any other feeds of similar analysis. This result is guaranteed. Our check to cover guaranteed increase will be mailed you if you are not satisfied. Order your trial ton of Special Dairy today from your dealer. Write us if you need further information.

INTERNATIONAL SUGAR FEED CO.
MINNEAPOLIS, MINN. Mills at Minneapolis and Memphis
Live Agents Wanted

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS

Chester County Farm Bureau Executive Committee Meeting

The regular monthly meeting of the Chester County Farm Bureau Executive Committee was held in its offices, Monday evening, November 8th, with president J. H. Halderman, Pottstown, Pa., presiding. Others present included vice-president Charles J. Garrett; Treasurer Isaac A. Passmore, of West Chester; William Pitt, New London; Joseph Phipps, Uwchland; William Evans, Malvern; G. Walter Sharpless, Toukshenamon, and Edwin Maule, Coatesville, R. D.

Mr. Passmore and Mr. Adams reported that several of the county organizations including the Fruit Growers Association and the Corn Growers Association will plan to have a number of exhibits at the annual meeting in January. However, there are a few organizations yet to be interviewed.

President Halderman and Mr. Passmore gave reports on the Group Conference of Executive Committees and County Agents of the eleven southeastern counties of the state at Reading. The particular benefits of the conference was the association with men of other counties that are doing similar work. At the conference particular stress was laid upon the community program of work and the State Federation of Farm Bureaus on the non-paid basis for two years, and going on the paid basis at the end of two years admitting counties that have a 10% paid up membership of their farmers.

Arrangements were made for the Farm Bureau's part in the Annual Corn Show of the Chester County Corn Growers Association, on December 2, 3, and 4th.

The County Agent reported for the past month's work. There have been started poultry demonstration farms with six (6) co-operators: Mrs. R. A. McCorkle, White Horse, Pa.; Harry Anderson, Uwchland; R. Chester Ross, Honeybrook; Mrs. Carl Thomas, West Chester, R. D.; Wm. B. Coates, Parkesburg, and Pusey Cloud, Unionville. Community meetings were held at a number of these places and very good results obtained. These farms will be conducted several years for the benefit of the community.

Results of the corn breeding plot on the Wm. Coates' farm were obtained during the month, and the corn root rot work on the farms of Kenneth Rhoads, James McIlvain, Jr., and A. J. McCue, were completed.

The remainder of the work consisted of livestock survey. Meeting at Great Valley Church. Potato seed source test, and wheat variety tests. The results of the spraying demonstration on the farm of Wilmer Young, Downingtown, was, the sprayed, 317.6; unsprayed, 257.1 an increase of 60.5 bushels.

Arrangements for the annual meeting in January were started. It is planned to get Gray Silver, secretary of the American Farm Bureau Federation, as one of the speakers.

mediate trees that are being encroached upon by the more dominant ones. Do not make the mistake of over thinning, but leave the small trees that have practically no effect on the main stand of the woodlot to develop into timber of the future. Leave the trees as evenly spaced as possible. Cut out all vines from the standing timber and remove the varieties that have little value in the woodlot or on the market.

President Willit's Address

(Continued from page seven)

sociation, good as that is and as far as it goes, will not be enough. We must develop local membership, and active local interest and activity. This is your organization, make of it what you will. Go back home to your constituents, and resolve to make 1921, in spite of unpromising market prospects, the most successful year in your association work.

CLEAN UP THE WOODLOT AND CUT THE WINTER FUEL

This is a good season to clean up the woodlot, improve the timberland, and gather the winter wood supply at the same time. All dead trees and large dead limbs should be made up into cord wood first, then the trees that have dead or dying tops. Remove those which are too crowded to make satisfactory growth, keeping in mind always to leave those trees that will make the best salable timber.

Look up the crowns of the trees in deciding which ones to thin out in a crowded group, and take out the inter-

ANNUAL MEETING

(Continued from page three)

A motion picture, "The Fountain of Youth," a film advertising the greater use of milk and its value as a health builder was shown during the banquet.

Following the banquet Frank P. Willits, acting as toastmaster, called upon Morris T. Phillips, Pomeroy, Pa., who in his response urged the farmers to use more care in the preparation of their milk for the market.

H. D. Allebach, vice-president, spoke briefly on co-operation.

Fred Rasmussen, Secretary of Agriculture for Pennsylvania, made an interesting address on general dairy subjects.

Secretary Robert H. Balderston, made an interesting address, referring particularly to his experiences in Germany with the American Friends Service Commission and visits to the dairy sections of Denmark.

Dr. Clyde L. King John A. McSparran, J. Henderson Supplee, W. W. Munn, president of the National Dairy Council; Paul B. Bennet, of New Jersey Bureau of Markets, also made brief addresses.

Mrs. F. M. Twining, of Bucks county, Pa., entertained with a recitation entitled "Money Musk".

During the banquet, Nelson James, of Rising Sun, Md., presented president Willits, in behalf of the directors, with a leather traveling case, which he received with thanks and appropriate remarks.

Second Day Session

The session on Tuesday morning was called to order by president Willits. This morning's meeting was devoted largely to the matter of educational and publicity methods for the greater consumption and food value of milk.

Addresses were made by Hon. Fred Rasmussen, Secretary of Agriculture for Pennsylvania; Prof. W. P. B. Lockwood, of the New England Dairy and Food Council; Mrs. Thomas Schaller, Jr., president Philomusian Club, Philadelphia; Mrs. H. C. Boden, chairman Food Section, Philadelphia Fair Price Commission, and M. D. Munn, president National Dairy Council.

QUALITY IMPORTANT FACTOR IN MARKETING FARM PRODUCE—THIS INCLUDES MILK

An example of the part that quality plays in a business of direct marketing of farm produce is furnished by the experience of a man in Kentucky who markets eggs, dressed poultry, meats and fruits to consumers in Nashville, Tenn.

The business was established over two years ago by obtaining a friend as the first customer. From this modest beginning the producer has obtained sufficient customers to buy all of the high-grade produce he can supply. Most of the shipments are made by parcel post.

This business is conducted on the basis of high quality with adequate returns. Customers are selected with as much care as most consumers show in selecting a producer from whom to buy farm produce. Customers are retained by never breaking the rule to supply only the best produce raised on his own farm. If, when an order is obtained, this farmer does not have produce of the highest quality, he informs the customer and states that unless otherwise instructed the produce will be shipped at the earliest possible date.



Weigh Your Feed—Weigh Your Milk

That's the way to put your dairy on a business basis—find out exactly how much you are feeding each cow and exactly how much milk she is giving. It has been our advice to dairymen for eleven years.

Pick out one cow—any cow you choose—and let the gain in her milk yield prove how cheap Larro really is.

If you don't get more milk than before, and if you don't make more profits from Larro (never mind what you paid for it), take the two empty sacks and any Larro you have left back to your dealer and get your money back.

Write for names of Larro users in your neighborhood and your nearest dealer.

The Larrowe Milling Company
Larrowe Bldg., Detroit, Mich.

Larro-feed
Many Imitations Prove Its Superiority

CHOLERA IN HOGS

Don't Introduce This Disease Into Your Herd Through Newly Purchased Hogs

Farmers do not seem to appreciate the importance of isolating newly purchased hogs before turning them into their herds. With the movement of hogs from one farm or from one district to another too much care can not be taken to be certain that the newly bought hogs are healthy.

Many hogs have been lost by this disease through the failure to observe necessary cautionary measures.

When hogs are received, they should be dipped in a disinfecting bath. They should be kept isolated from your own herd for two or three weeks, they can then be carefully observed and if at the end of three weeks no illness has developed, it is generally safe to turn them into your general herd, first giving them, however, a second disinfecting bath. Crates or boxes in which hogs have been transported should always be disinfected.

Farmers can not be too careful about visiting hog lots or pens on other farms. Hog cholera is readily carried from one place to another. Cases of proven transmission of the disease on the shoes, by horses, and cattle carrying the germs on

IMPROVE YOUR HERD

Cut Out the Boarders—With the high cost of feeds dairying is a close proposition. Replace the poor milkers with cows you raise yourself and know what they will do. The best for this purpose is



their feet; by wagon wheels, prowling dogs, etc., are numerous.

If you would protect your own herd—shun an infected farm unless every precautionary measure be taken.

One hour's work will buy more milk than ever before.

Faulty diet slays millions—milk saves thousands

A permanent woodlot is an essential part of a well equipped farm, and in many cases is the source of the winter fuel supply. In heavily wooded states, especially, farmers are likely to overlook this fact and recklessly cut, misuse, or clear up their forest areas. For fuel, it is never advisable to use thrifty, immature trees when it is possible to get inferior mature timber.



LEWIS LINSEED CAKE

The compressed feed will keep your cows in good flesh and will increase the milk flow.

LINSEED CAKE MEAL

Has the same Fat and Protein content as the Linseed Cake—but it is already ground.

We'll be glad to take you through our Plant where these feeds are made. Write us if you are interested.

John T. Lewis & Bros. Co.

705 Lafayette Building

Philadelphia



Chester County's on the right track

It is interesting to note that there are probably more Empire Milkers in use around here than any other milking machine made; and that is also true all over the U. S. That in itself, shows that dairy farmers recognize the Empire as the best—it is! We can prove that.

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EASTERN SALES COMPANY

Farmers & Mechanics Bldg.

West Chester, Pa.

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS



Why So Widely Used?

There is only one reason why Kow-Kare (formerly called Kow-Kure) is so generally used by dairymen all over the country.

Merit, proven time after time, in treating the ills of milking cows is the one answer.

By assisting the digestive and genital organs to function normally Kow-Kare throws off diseases and is a reliable treatment for Barrenness, Abortion, Retained Afterbirth, Scouring, Lost Appetite, Bunches.

Buy Kow-Kare in 70c and \$1.40 packages from feed dealers, general stores or druggists.

DAIRY ASSOCIATION CO.
Lyndonville, Vt.



DON'T THROW YOUR OLD CANS AWAY



American Retinning Co.
819-823 N. Lawrence Street
PHILADELPHIA, PA.

Reading Bone Fertilizer

Quality Service Satisfaction
Feeding the World: The American farmer's job. To do your utmost the land should be fed too. Stick to the old dependable when it comes to feeding the land—Reading Bone Fertilizer.

(This trade mark means quality)
Reading Bone Fertilizer Co., Reading, Pa.



Milk is health insurance, good health is life insurance.

November Milk Conditions

(Continued from page one)
made, at others, drops of one cent a quart were announced.

It was finally arranged, that, beginning with December first, the price of grade B market milk at receiving stations in the 50 mile zone in this territory, should be \$3.08 per hundred pounds or 8 cents per quart f. o. b. Philadelphia. These quotations applying to 4% butterfat milk.

Many of the manufacturers state that they are unable to meet this price and meet the competition of manufacturers in near by territory. In such cases they are paying as a rule, the recent basis agreed upon with their patrons.

The condensed milk situation during November showed little, if any, improvement. Buyers are to a large extent, still out of the market and prices of manufactured goods are largely nominal. Some prospect for price concessions is heard but has not at this time been borne out in fact.

The butter market held pretty firmly until late in November, when there was a sharp break from which, so far, there has been no recovery. In a few days the price of 92 score butter dropped 8 cents a pound, being quoted at 57 cents on December first.

Danish butter contributed largely to the weakness of the market. Within a few days at the close of November, 16,159 casks and 1,339 boxes of Danish butter was received at the port of New York. This butter has been selling wholesale at prices ranging from 54 to 56 cents a pound.

KEEPING FARM ACCOUNTS AN AID TO BETTER PROFITS

Farming is a business, and, to be successful it must be conducted in a businesslike manner. It involves the production and sale of commodities, just as does manufacturing. The business man, whether in factory or on farm, should be constantly considering two questions:

1. What profit is my business making?
 2. How can that profit be increased?
- The first of these two must be answered before and intelligent effort can be made to answer the second. Proper accounting leads directly to the answer to the first question, and hence it is essential to any well-thought-out plan to increase profits.

The problem of the farmer is to meet conditions on his farm in a way that will give him the greatest net returns, year in and year out, for the use of his capital, his labor, and his managerial ability. Before he can be considered a successful farm operator he must produce results that will cover the value of all these. Capital can earn interest without labor on the part of its owner, and labor can earn wages without owning any capital. The farmer, utilizing both in the conduct of his business, should secure returns that will cover both interest and wages. Not until both of these have been more than covered can any profit be credited to the farming operations. Nothing but return in excess of interest and wages can properly be considered as net profit.

There is reason to believe that many farmers, owing to a lack of proper records, do not know what returns they actually receive. Doubtless many are making small wages or none, and no net profits.

Middle age is the dangerous age—begin using milk.

Guernseys

The Cow That Gives The High Priced Milk

TWENTY-FIVE FOR SALE

Both Male and Female

Prices

\$75 Each and Up

Over 100 to Pick From

M. T. PHILLIPS

POMEROY, PA.



Cold weather with long nights is "just around the corner"—NOW is THE time to have your car's battery given a good outside charge and a thorough inspection for the strain that Fall and Winter will place upon it. HERE is the station to do the work—the station that places SERVICE FIRST and sales last. Recharging, repairing, rebuilding.

Pusey & Young Storage
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WEST CHESTER, PA.

COATESVILLE, PA.

FOR SALE REGISTERED HOLSTEIN BULL CALVES

From Dams with Large Cow Testing Records and from a Sire whose two nearest Dams, as Belfers, averaged 23264 lbs. Milk and 1003 lbs. Butter in 365 Days

I. V. OTTO BOILING SPRINGS FARM CARLISLE, PA., R 6

ROSECOYD FARM'S

Durocs of Quality

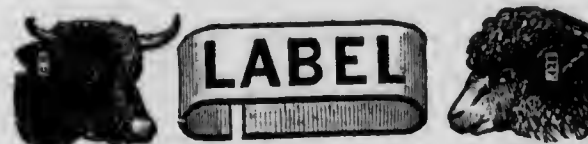
Well Kept Well Bred Well Fed
D. M. STOUTD, Hershey, Pa.

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Sales Anywhere—Anytime



The original ear label, used by many Record Associations and best breeders. Will identify your live stock and aid you in keeping breeding and production records. Samples free. C. H. DANA CO., 87 Main Street, West Lebanon, N. H.

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Keep Farm Animals Healthy

—full of life and vigor. International Stock Food Tonic helps them to properly digest and assimilate their food. Keeps their blood pure—helps them to avoid disease. The feed saved more than pays for it.

INTERNATIONAL Stock and Veterinary Preparations

—include International Stock Food Tonic, Hog Tonic, Worm Powder, Animal Dip, Phenol (Disinfectant), Colic Medicine, Heave Powder, Distemper Powder, Gall Salve, Poultry Preparations, Silver Pine Healing Oil and many others.

Successful for 30 Years

A steadily increasing demand for over a quarter of a century proves their popularity. There's an International preparation for every farm animal.

Ask Your Dealer

Barren Cows

Must be Made to Breed or Your Dairy Business will be a Failure. They Can Be Made to Breed

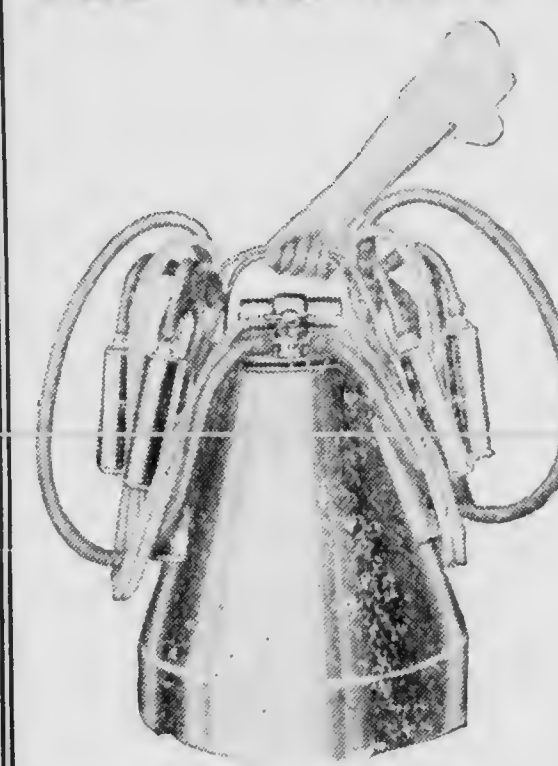
By the use of

Hood Farm Breeding Powder
We say this confidently because it has been used with such marvelous results by so many breeders. Every cow at Hood Farm is treated with the Breeding Powder, and we know that it does make barren cows and heifers breed; we know that it checks and prevents abortion; we know that it makes cows clean quickly, thereby saving us hundreds of dollars annually.

Order today, mentioning this paper.

Prices prepaid \$1.15, \$2.75 and \$5.00. Flexible Injection Tube, by mail, 90c. Mammoth size Breeding Powder and Tube, prepaid, \$5.75. C. I. HOOD CO., Lowell, Mass.

The NU-WAY Sanitary Milker



To thoroughly realize the truth of our statements it is necessary to see and examine the Nu-Way Milker, or better still, to see it in actual operation on the cows. The simplicity of the machine throughout; the regular, gentle action of alternately milking two teats at a time; the unbreakable glass showing the milk flow at each teat cup; the ability to quickly

cleanse and sterilize every part coming in contact with the milk; the use of the finest materials known in the construction of milking machines—these and other equally important features, most of which are exclusive, are what make the Nu-Way the most talked-of milking machine on the market today.

If you have a dairy of six cows let us send our descriptive catalogue, also the name of the nearest Nu-Way user. This will not entail the slightest obligation to buy.

STANDARD SUPPLY COMPANY
WEST CHESTER, PA.

General Distributor for Pennsylvania, New Jersey, Maryland and Delaware

Both 'phones

"THE PRICE OF MILK"

By CLYDE L. KING, Ph.D.
Formerly

Chairman, Governors Tri State Milk Commission (Pennsylvania, Maryland, Delaware), Federal Milk Commissioner for the Eastern States, Milk Price Arbitrator for the State of Pennsylvania.

Comprehensive Treatment of the Milk Industry in All Its Phases

NOW READY FOR DISTRIBUTION
Every Dairy Farmer Should Have a Copy of This Book

TABLE OF CONTENTS:

Introductory—Chapter 1. The Public Interest in the Price of Milk. Part 1. The Price to the Producer—Chapter 2. The Forces That Fix the Price of Milk. 3. Manufactured Milk Products and the Price of Milk. 4. The Price Interdependence of Local, Primary and International Markets. 5. The Cost of Production. 6. Shall Dairymen Organize for Collective Bargaining? 7. Policies of Dairymen's Organizations in Their Relation to Price. Part 2. The Cost of Milk Production. 8. The Cost of Milk Distribution. 9. Sanitary Requirements in Their Relation to Price. 10. How Shall Milk be Distributed? 11. Can Milk Distribution Costs be Lowered? 12. The Public Interest in Milk Distribution. Part 3. Fair Price Policies. 13. The Food Value of Wholesome Milk. 14. Co-operation and Price. 15. Fair Price Policies. Endorsed by Herbert Hoover, former Food Administrator; John LeFebvre, International Milk Dealers Association; Margaret H. Boden, Chm. Food Section, Philada. Fair Price Commission; R. W. Balderston, Secty. Inter-State Milk Producers Association.

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FOR SALE BY

The Inter-State Milk Producers Assn.

721 Heed Bldg., Philadelphia



SERVICE

Our main headquarters at 1916-1918 Market Street, Philadelphia, contain 36,550 square feet of floor space, over four fifths of an acre. This together with the facilities of our Wilmington store, makes it possible for us to carry the largest and best assorted stocks of everything for the farm and dairy of any firm in the country.

This is a double benefit to our customers. It enables us to purchase in quantities and therefore to advantage—which advantage in price we share with our customers; and having adequate stocks on hand at all times enables us to make shipments with exceptional promptness. Particularly so, in case of emergency.

This means that those dealing with us can always depend upon securing the full benefit of the best prevailing market prices, and of having their needs supplied without delay at all times.

We are headquarters for the best lines of farm and dairy supplies, machinery, parts, and equipment, including the following:—

American Seeding Machine Company
Seeding Machines, Drills, Broadcasters and Corn Planters

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The ideal Disinfectant and Deodorizer for Farm and Dairy use.

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Gould Pumps for every service

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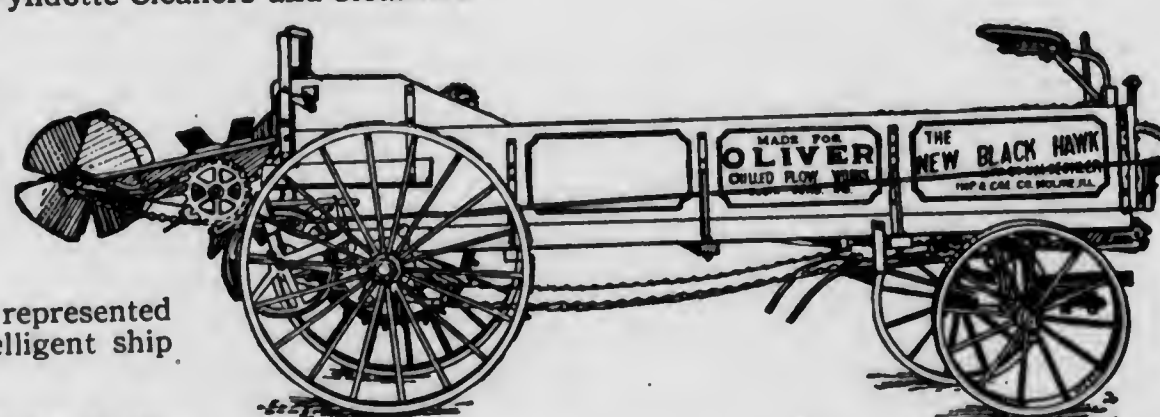
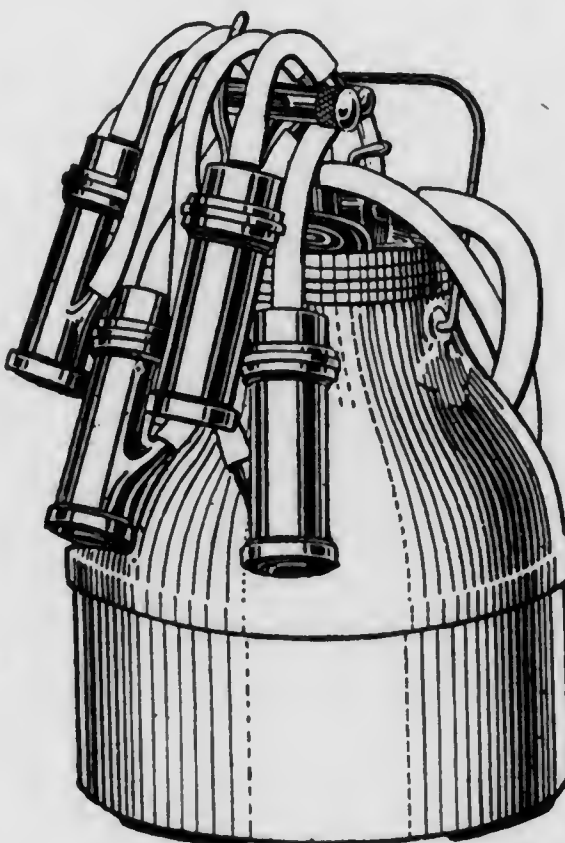
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Mail Orders receive particular attention. Every article must be exactly as represented or we will not handle it, and we make every effort to insure prompt and intelligent shipments of orders.

Farmers and Dairymen like to study out for themselves the problem of what is best adapted to fill their individual requirements. To aid our customers along this line we keep on hand at all times, special booklets and other literature containing detailed information of constructive value. Please specify on coupon below items you are interested in, by checking and mailing to us, and the literature desired will be forwarded at once. Without cost or obligation of any sort.

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Everything for the Modern Farm and Dairy

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Gentlemen:—I am interested in (Indicate by check in square)

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| <input type="checkbox"/> Pasteurizers and Vats | <input type="checkbox"/> Milk Bottle Caps | <input type="checkbox"/> Tractors | <input type="checkbox"/> Wyndotte Washing Powder | <input type="checkbox"/> Harvest Machinery | <input type="checkbox"/> Gould Pumps | | |

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Milk Producers Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE INTER-STATE MILK PRODUCERS ASSOCIATION, Inc.

VOLUME I

WEST CHESTER, PA., AND PHILADELPHIA, PA., JANUARY, 1921

NUMBER 9

DECEMBER MILK CONDITIONS

SITUATION CONTINUES COMPLICATED

Unsatisfactory conditions continued in the milk markets in this territory throughout the month. December, it was hoped, would show a marked decrease in the milk flow, but this was not the case. In some few localities a smaller quantity of milk was produced, but this was overbalanced by continued good supplies from other parts of the territory. This condition is not found in the Philadelphia market alone, but in practically all the different primary milk markets the same conditions prevail.

Along with continued high production there has, if anything, been a falling off in general consumption, due no doubt to decreased earning power of the public who are either working on shorter hours, accepting lower wage rates or in some cases, temporarily idle.

Price conditions, while uniform as far as fluid milk for general consumption is concerned, have been anything but satisfactory in manufacturing districts. There has been absolutely no certainty as to what prices for milk for manufacturing purposes would apply, even from day to day, in some of the markets. It was largely a case of depending on prices of goods offered in competition from other districts. If lower prices were made for competitive business, manufacturers had either to meet the competition and lower the price paid producers or discontinue operations.

Never before in the history of the milk industry in this district has the situation been so complex.

The smaller dealers obtaining, from day to day, more milk than their routes would absorb, have been asking producers to withhold some of their milk. There has been scarcely a small dealer in the local market who would put on a new dairy and when he did, it had to be strictly a high grade proposition.

Loose milk, on the platform, was absorbed for a time at association prices, and the only thing that held the situation in line was the fact that some buyers were not obtaining a regular supply from distant shipping points, outside of this association's territory. At times milk on local platforms did not bring over 6 cents a quart. Quantity milk from points outside the Philadelphia milk shed has been offered at 7 to 7½ cents per

quart Philadelphia, without finding a buyer.

The condensed milk market shows little betterment. There has been practically no buying in quantity for export. Domestic business drags and is largely of the hand to mouth order. Some price concessions have been reported but they are unimportant. Unadvertised brands move more freely than the higher grades. Retail stores are also carrying quantities of milk substitutes, which are sold at price concessions. Bulk condensed milk has been almost at a standstill.

THE DAIRY FARMER'S FUTURE

By PAUL B. BENNETT

Just what is the situation confronting the dairy industry today? We are all aware of a price decline which is fortunately not as serious as that affecting many other industries, or even other branches of farming. The hog farmer is down to a pre-war price basis, the cotton farmer is offered about 15 cents for cotton which cost 35 to 40 to grow, and wheat, corn and potatoes have already declined even more than milk. It is also true that milk did not increase in price as much as most commodities and

Next spring this condition may be changed. We are feeding concentrates purchased during the summer at high prices so as to be sure to have something to feed. We are milking cows raised, or bought on the open market, during the past few years at high prices. In short, production costs on most farms have decreased but little, on many not at all. What shall the dairy farmer do? Shall we sell some cows to decrease production? This is an obvious remedy for over-production and there are unquestionably many low producing cows which can be disposed of to advantage.

Increasing the efficiency of production now, as always, is one of the most effective remedies for the situation, and as the average production of our herds is too low it will be good business to weed out, right now, before the price of beef falls too low, all of our unprofitable producers, and that means all that produce less than at least 6,000 pounds of average milk per year. Then get ready for the future by using a pure-bred sire and breeding up the herd.

Better and more economical feeding and purchase of feeds is another method of reducing production costs. There is undoubtedly much room for improvement right here. Millions of dollars are wasted by dairymen annually in the purchase

of so-called mixed rations low in digestible nutrients, and more intelligent methods of feeding would still further reduce costs. A co-operative cow testing association will help every member to find his poor cows and to feed more economically. A co-operative bull association is a good way to secure the service of a better sire. Nearly every dairy community should have both as a means to improvement.

So much for more efficient production. How about our selling methods? Production is undoubtedly more efficient than 50 years ago and many herds have almost reached the maximum. I recently saw a herd of grade and purebred Holsteins which during the past year averaged over 11,000 pounds of milk each for over 30 cows, which was sold at a premium over his organization prices, but when this efficient dairyman with his herd of cows producing at least 100

that the pre-war price was too low, and, therefore, the decline should not be as great. The export demand for our manufactured dairy products, developed from almost nothing to immense proportions during and since the war, has now dwindled to almost nothing because of the low buying power of practically all Europe. We are producing more milk than we did in 1914 and, therefore, have a considerably greater amount of milk to be consumed. We are in addition receiving considerable more foreign butter at our ports, due to the favorable exchange. Most of these facts are well known and are only repeated here so that they may serve as a basis for our reasoning.

On our farms we are still paying war prices for labor and are not finding much labor at those prices because the thousands out of employment in the cities refuse, for the present, to work for farm wages and to leave the city for any wage.

(Continued on page 7)

(Continued on page 9)



Herd of Fred H. Bateman, Bateman Mfg. Co., Grenloch, N. J.

CONSUMPTION OF MILK AND MILK PRODUCTS

By Prof. W. P. B. Lockwood

At the annual meeting of the Inter-State Milk Producers Association, I made an address on the subject of what we have been doing in Boston, Mass., on milk advertising and educational work.

A few figures are necessary in order to place the subject before you properly.

The railroad commissioner's reports show that during the year 1919, 336,946,456 pounds of milk and cream were brought into Boston by rail. This was an increase of 28.7% over the amount brought in in 1916, and 46.9% more than was brought in in 1913, according to the same reports. In 1916, the high price of milk retail was 9 cents per quart; in 1919 the price was 17 cents or an increase of 88.8%. The lowest price retail in 1919 was 15 cents, which price lasted two months.

The chamber of commerce reports show that condensed milk to the equivalent of 233,255,160 pounds of liquid milk went through or was distributed through the Boston market. (No exports reported.) This was an increase over 1916 of 154%. Very little condensed milk is made in New England. The above does not include bulk or barrel goods.

Dr. Jordan's reports and information coming from three concerns only, indicate that milk powder with a liquid milk equivalent of 11,747,000 pounds was distributed through the Boston market. This was an increase of 34% over 1916.

Oleo sold through the Boston market was 2,706,400 pounds, or an increase of 120% for the four years.

Dr. Jordan says that the per capita consumption of milk in Boston (Boston proper, not greater Boston) was 0.457 quarts in 1916 and 0.418 quarts in 1919, or a per capita consumption shrinkage of only 0.039 quarts or 8.7%, against an increased cost of 88.8%.

During this time several agencies have helped.

(a) The regional Milk Commissioner's findings and prices set by them gave the public more confidence in the business.

(b) The Agricultural College and the U. S. Department of Agriculture had special workers on milk and dairy products.

(c) The Food Administration backed an advertising campaign that was financed by distributors and producers, spending \$11,000.

(d) The Boston Milk Campaign was put on at a cost of \$96,000 on advertising and milk educational work.

(e) During all of this time there was no unfavorable comment or derogatory outbreak of the press relative to the business.

The work of the campaign stopped on account of lack of support and permanent organization.

Movement Being Reorganized

The movement is being reorganized on the basis of a dairy and food council. In this organization we have the producers, the distributors, the manufacturers, the agricultural colleges, State Departments of Agriculture, State Departments of Health, public citizens and consumers. It is hoped to interest the commissioners of education. The council will act as the overhead organization and secure the money and oversee the work done in the different cities and towns. It is proposed that the work be done by milk educational committees rather than by campaigns as people are tired of campaigns.

Two Types of Work Will Be Done
First—The educational work through the schools. During the Boston campaign 633 talks were given in schools; 157,000 children were reached.

Along with this are the talks in factories, stores, before women's clubs, parent-teachers' associations, welfare centers, etc., etc. During the Boston campaign 246 of these talks were given, reaching 55,000 adults.

Second—Newspapers, car cards, movies, etc., are used.

During the Boston campaign 14 papers with 204 insertions were used. Four car cards, one each for four months, or 56 months. The Milk Fairies play for children was given by the children in the schools and playgrounds 90 times; 40,000 children saw it.

261,000 pieces of literature, posters, etc., were distributed.

A milk conference was held, the best speakers available were used and school teachers and others interested in milk work were invited.



Grand Champion Guernsey Bull, National Dairy Show, 1920
Imp. Ichen May King 25174, calved May 29, 1912. Entered by F. E. Fox & C. Kingston & Sons, Waukesha, Wis.

Very interesting results came from the work in the schools. Competitive essays on milk were very illuminating as to the children's ideas. One boy said that Benny Leonard, the prize fighter, drank three quarts of milk a day, so he was drinking milk. Another boy said that the cow gave "tender, juicy milk."

In the Boston campaign 75% of the money went into newspaper and car card advertising. It is very questionable as to whether 50% should go for this. We made mistakes and expect that all will.

The first thing should be to study the people you want to reach—the women and children—and do such work as will reach them.

One other thing—do not try to crowd too much into a given space. Make one point and drive it home, that is about all the average reader will stop to read. Our distributors and producers feel that it is good work and increases business, and are willing to support it on a permanent basis.

The Pocopson receiving station of the Supplee, Wills, Jones Company, Philadelphia, located in Chester county was closed on January first. Not enough milk was being received to warrant the maintenance of the plant.

Patrons at this station are either shipping their milk direct to the Supplee, Wills, Jones Co., or have been transferred to the P. E. Sharpless Co.

PHILADELPHIA INTER-STATE DAIRY COUNCIL

Active Work Begun

Plans are going forward rapidly in the preparation of working arrangements for the educational and advertising propaganda in connection with the food value and greater consumption of milk and milk products.

Following the acceptance and authorization of the plan at the annual meeting of the Inter-State Milk Producers Association, the actual forming of a working organization was undertaken and completed.

The following representatives have been named as the executive committee to carry on the program: Dr. Clyde L. King, chairman, representing the public; Robert W. Balderston, secretary, representing the Inter-State Milk Producers Association; Henry N. Woolman, representing the Philadelphia Milk Exchange, and P. E. Sharpless, of P. E.

PENNSYLVANIA FIFTH ANNUAL FARM PRODUCTS SHOW

The Fifth Annual Farm Products Show and annual gathering of agricultural organizations, under the auspices of the Pennsylvania State Department of Agriculture, will be held in Harrisburg, Pa., January 24th to 28th inclusive.

The show will be held in the Emerson-Brantingham Building, Tenth and Market streets, where more than twice the amount of floor space than was used for exhibition purposes last year, will be available. The exhibits will be more varied and more extensive in character than ever.

The Inter-State Milk Producers Association will have a booth in the north east corner of the exhibition hall, adjoining the exhibit of the Bureau of Animal Industry. Visit this booth and exhibit. See the mechanical cow—she gives milk; also demonstration of the handling, transportation, manufacture and consumption of dairy products. Representatives of the association will be in attendance to give information, data, market conditions and the plans of the Dairy Council in connection with the educational and advertising program for the greater consumption of milk.

Included in the list of organizations that will meet in connection with the show are: The State Horticultural Association, of Pennsylvania; Pennsylvania Breeders and Dairymen's Association; Pennsylvania Holstein-Friesian Association; Pennsylvania Potato Growers Association; Pennsylvania State Bee Keepers Association; Pennsylvania Poultry Association; Tobacco Growers Association; Pennsylvania Nurserymen's Association and the Pennsylvania Sheep Breeders and Wool Growers Association. The Pennsylvania State Veterinary Medical Association will also hold its annual convention as a part of the show.

These meetings alone will attract thousands of agriculturists from all parts of Pennsylvania as well as from near-by states. The Potato Growers Association alone is expecting at least 400 of the leading potato growers of the state to be in attendance.

You should make every effort to attend this show and be present at the meetings of such organizations as you may be interested in.

SUPPLY OF MILK IN VARIOUS CITIES IN THE UNITED STATES

From data compiled by the Bureau of Markets, we are able to present briefly the status of the milk supply in many of the large cities in the United States which will give some idea of the milk flow as of December first.

In 40 cities reporting, a surplus in the supply was definitely reported by 15. In two cities the supply was equal to the demand, while seven reported a shortage. Seventeen cities, while reporting other data did not report on the surplus or shortage in the supply.

To bring this nearer home, we note that in ten cities, located in the eastern territory, six reported a surplus and but one a shortage. The remaining three did not report on the supply.

The Nestle Food Company is installing the necessary machinery in its Malvern, Penna., plant to enable it manufacture certain grades of candy. At the time it will manufacture caramels and what is known as "hard candies." The new department expects to get in full operation early in February.

(Continued on page 13)

PENNSYLVANIA STATE GRANGE ANNUAL MEETING

The State Grange of Pennsylvania, held its 48th annual meeting December 14 to 16 inclusive, at Allentown, Pa. There was a very large attendance, representatives being present from practically every section of the state. Transportation expenses for delegates aggregated \$13,000, being double the amount expended for this purpose last year.

The largest class ever present, aggregating 956, were given the Sixth Degree while a large class had the Fifth Degree conferred.

The general business of the Grange was completed with satisfaction and despatch, among resolutions passed was the following:

WHEREAS: The Pennsylvania Department of Agriculture, during the past year has displayed commendable activity in aiding in solving the problems of the farmers of Pennsylvania, and

WHEREAS, through the activities of the newly established Bureau of Markets, the Pennsylvania Department of Agriculture is working toward a solution of one of the greatest problems confronting our agricultural life, viz., a more efficient system of transporting and distributing the products of the farm, and the necessity of co-operative organizations among our tillers of the soil, and

WHEREAS, the Department has accomplished excellent results in its work of eradicating tuberculosis among our cattle and the control of disease and pests affecting our plant life, therefore, be it

RESOLVED: That the Pennsylvania State Grange, in annual session assembled, heartily endorse the work of the Pennsylvania Department of Agriculture, and urge that the work of the Department be given the full measure of support from the incoming Legislature that the importance of the work merits; that funds be provided for the indemnifying of cattle disposed of in the tuberculosis eradication work and that everything possible be done to facilitate and further the work the department is engaged in for the betterment of the agriculture and the people of the State.

The State Grange now aggregates a total membership of 83,000 and should include every farmer in the state.

The following officers were elected to serve for the ensuing year.

Master, John A. McSparran; Overseer, Richard H. Benjamin; Lecturer, Phillip H. Dewey; Steward, T. E. Talbott; Asst. Steward, R. H. Bovard; Chaplain, Rev. Geo. W. Hatch; Treasurer, Frank P. Willits; Secretary, Fred Bernkman; Gatekeeper, J. B. W. Stuft; Ceres, Mrs. Jennie M. Rodgers; Panoma, Mrs. L. T. Rodgers; Flora, Mrs. C. C. Rankin; Asst. Steward, Ada Bortels; Executive Committee, A. H. Fullerton; Finance Committee, W. S. Ross; Director Keystone Grange, G. P. Wachob.

DECEMBER ASSOCIATION ACTIVITIES

It is to be expected that the current activities of the Inter-State Milk Producers Association be less pronounced. There are several reasons in point.

Early in the month the efforts of the entire force were toward making the annual meeting and banquet a success, and it has been repeatedly stated that both of these events were the best and most fruitful—the meetings from a business and educational standpoint and the banquet from a social and entertaining standpoint.

Toward the close of the month the usual Christmas and New Year holidays largely interfere with the routine work of the organization.

At the same time we have not been idle.

We can report the handling or placing of 38 dairies during the month.

There has been one meeting of the board of directors, that following the annual election of directors and one meeting of the entire executive committee, to consider important matters in the field.

Conferences in connection with the newly formed Philadelphia Inter-State Dairy Council (our advertising body) have been numerous and this branch of the Inter-State activities has been formally launched.

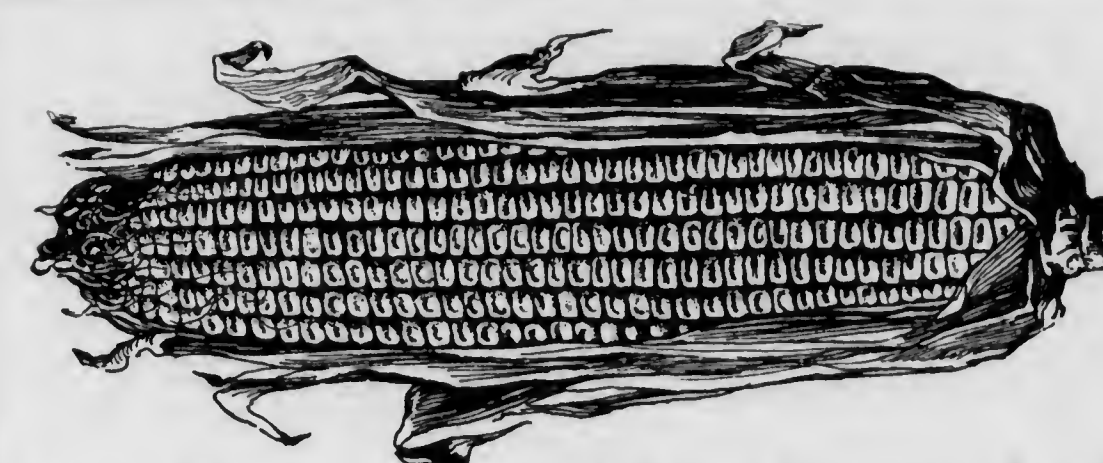
The usual number of conferences, some of major, others of minor importance, have been held between buyers and producers. Such problems come up for almost daily attention.

The most pronounced effort in this direction was the solution of the Leslie, Md., receiving station proposition, which is treated at length elsewhere in this issue.

Legislative problems continue to be of interest and have demanded a considerable portion of your officers attention during the month.

Representatives from the office have attended 18 meetings of locals in the field, while a total of 144 members have been added to the rolls.

"The cedar tree is all right in the grave-yard, but it is one of the worst enemies of the fruit orchard."



Feed Your Crops What Nature Lacks

YOUR fields are already rich in some plant foods. But they lack *three* of the foods your crops MUST have if you are to get abundant yields. Now read this carefully, because it is important to you.

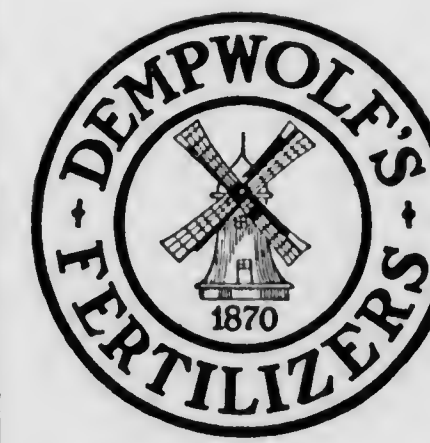
Your crops need thirteen different chemical elements—or foods. Of these thirteen, ten are already in your soil in abundance.

Without the other three,—Ammonia, Phosphoric Acid, and Potash,—you cannot possibly profit by the ten you already have!

These three foods you can best supply in Dempwolf's Fertilizers. Add these foods to what your soil already has and you can produce bountiful crops. Without them, your crops must practically starve, no matter how well you care for them otherwise.

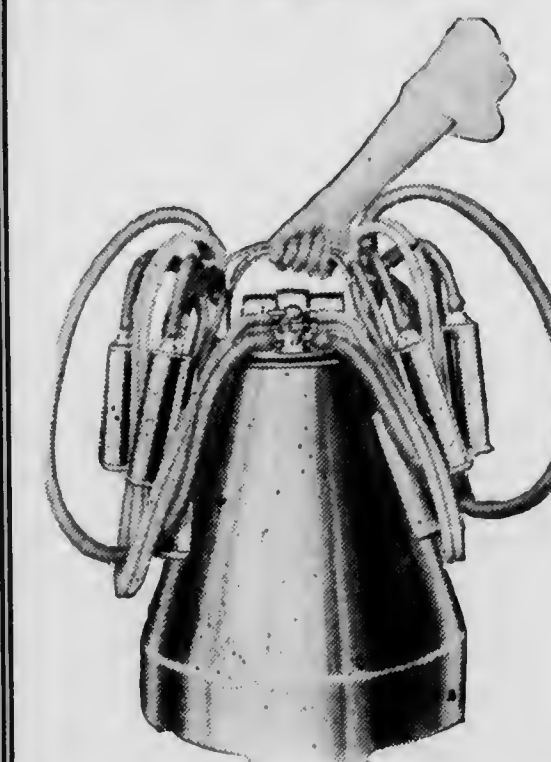
For 50 years, we have been furnishing Dempwolf's Fertilizers to the best farmers of this section. We surely know our business, and you can just as surely profit by the knowledge of fertilizers we have gained in all these 50 years.

Write us for information that will enable you to get exactly the right fertilizer for your needs.



York Chemical Works
York, Pa.

A MILKER AND A POLICY THAT ASSURE SUCCESS



WE TAKE THIS OPPORTUNITY OF EXPRESSING OUR APPRECIATION TO ALL WITH WHOM WE HAVE HAD DEALINGS IN THE PAST, AND TO GIVE ASSURANCE OF OUR CONTINUED INTEREST AND CO-OPERATION.

Every dairyman is more or less interested in the milking machine. Whether you expect to purchase or not you will find the NU-WAY catalogue very interesting and well worth having; it will explain many new and exclusive features of real importance that will appeal to you. Why not write for it today?

STANDARD SUPPLY COMPANY
WEST CHESTER, PA.

General distributor for

Nu-Way Sanitary Milkers

in Pennsylvania, New Jersey,
Maryland and Delaware

Both 'phones

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Editorial

Business conditions generally are in a most unsatisfactory shape. The process of readjustment from the inflated war time price basis is under way, but the movement does not, by any means, flow smoothly. There is a lack of understanding as to developments in the immediate future, and it is practically impossible to prophesy what the near future has in store.

Producers and manufacturers have had to bear burdens they did not anticipate. Labor is feeling the effect of the process of evolution. Many plants have either closed or have curtailed production. The earning power of many employees has been greatly reduced. Everybody is playing a waiting game, hoping that in the process of readjustment they may get off without serious difficulty.

Price reductions in food products have been more or less general, but in most cases it has been the producer who has had to bear the burden of the reduction.

The consumer has profited in some instances, particularly in connection with milk prices, although probably not as much can be said for butter, cheese and condensed milk.

Lower small grain prices have prevailed. In many cases pre-war price levels have been touched. Flour is lower and the consumer has had some benefit of the reduction. Prepared dairy feeds, largely made up of small grain products and special concentrates, have, however, not followed the market down at the same relative rate, although grains as well as concentrates are lower in price.

Manufacturers are resisting sharp declines in prices in all lines. To accept prices that would move goods, would, in many instances, invite financial difficulties, as returns might not cover loans for which the goods have been pledged.

Unfortunately the farmer is between the upper and lower millstones. He has grown and produced his products at high costs of seed, fertilizers and labor for tillage, harvesting at abnormally high expense and now faces marketing at prices which are far below the cost of production.

In many cases these are perishable products and must be moved or a total loss taken.

The farmer as well as the general manufacturer will have to take their medicine, bitter though it may be, but a firm basis on which business can be transacted must be reached and the sooner the better.

In the meantime we must all consider carefully, every move made and every step taken. Take council with your co-producers, keep both feet on the ground and consider every stage of the readjustment so that whatever may be done may prove to be for the best interest of industry on the whole.

Plans are under way at Washington looking toward the enactment of revised tariff laws during the present short term of Congress. This is always a complex proposition and to obtain legislation that will be satisfactory to all interests involves a long drawn out battle.

Opinions differ as to the advisability of forcing legislation, just for the sake of legislation, without the careful preparation and thought that is also likely necessary.

It is understood that the proposed bill carries substantial duties against raw agricultural products such as the principal small grains, wool and cotton. Considerable pressure is being brought to bear to have the bill include a higher rate of duty on butter and some other dairy products in order to protect the domestic dairy industry.

A resolution has been adopted by the Dairymen's League of New York, favoring a protective tariff on dairy products "that will cover the difference in the cost of labor that will be reciprocal with the tariff on manufactured goods that the farmer has to buy."

Your own association has gone on record in the shape of the following resolution, adopted at its recent annual meeting.

WHEREAS, the large importations of dairy products, oriental vegetable oils, wheat, etc., into this country is reacting to the detriment of dairy farmers, growers of cotton seed and grain, therefore,

Be it resolved: By the Inter-State Milk Producers Association, that we urge the National Congress to make such tariff import regulations, both in raw and refined products of the character named, as will protect the farmers of the United States from the competition of these products, produced at lower costs than are commodities grown in this country.

The Milk Producers Review while but a "youngster," comes to you with greetings of good will and happiness throughout the coming year.

While we may not attain all that we may desire, let our aims be the highest and noblest, our efforts constantly in the direction of the greatest good for all.

Let it be our effort to develop and foster a bigger and stronger Inter-State Milk Producers Association, because, in its strength collectively is its value individually to each and every one of its members.

H. D. Allebach, vice president of the Inter-State Milk Producers Association, was, at the annual meeting of the directors of the association, elected as sales manager and will, hereafter, be in direct charge of sales and the placing and transfer of dairies.

Sheep are dual purpose animals—wool in the spring and lambs in the fall.

LOUISIANA MILK PRODUCERS ASSOCIATION OFFICERS INDICTED

The officers of the Louisiana Milk Producers Association, with headquarters at New Orleans, Louisiana, have been indicted by the Federal officers in that state for alleged violations of the Sherman Anti Trust Act. The National Milk Federation, of which the Inter-State Milk Producers Association is a member, has extended its support to the organization. The national organization stands for obedience to the law and after an investigation of the case by Mr. J. D. Miller, of the Dairymen's League, of New York, it was decided to give support to the indicted officers. A fund of \$1,000 was subscribed by various member associations of the Federation.

This is the first indictment under the Sherman Anti Trust Act that has been found against any co-operative milk producers organizations and the outcome is being watched with interest.

BALTIMORE SITUATION By D. G. Harry

The price of milk in Baltimore for January remains the same as the preceding month, namely thirty-four cents (\$.34) per gallon for 4% milk, with the usual differential of one-half cent (½c) per gallon above and below this standard for each 1/10% butterfat, with the exception of four cents (\$.04) per gallon individual surplus price for all milk shipped above the average sold during September, October, November and December. New shippers to be paid on a 50-50 basis—that is, one-half surplus price and one-half regular price.

This surplus price was necessary on account of the dealers being compelled to carry a large surplus ever since the month of September.

The price of milk on the street remains the same, fifteen cents (\$.15) per quart and nine cents (\$.09) per pint.

The supply of milk is still larger than the demand, which is caused partly by the sales falling off, due to a large number of men being thrown out of employment.

Arrangements have been made to put on an extensive advertising and demonstration campaign. An office has been opened and one of our directors will have charge of the work. We hope in this way to increase the consumption of the dairy products.

The finance for this campaign will be raised jointly by the milk dealers and this organization.

Many of the prominent people of the city have signified their willingness to co-operate with us in this campaign, as well as the State Board of Agriculture, University of Maryland, Health Department, Dr. McCullom, Women's Civic League and others, and we hope in this way to greatly increase the demand for milk in Baltimore, as well as add to the health of the city.

MULE ROUTS MILK THIEF

Farmer Adopts Novel Police System to Protect Cow

Raleigh, N. C.—A terrific racket last night in the barn of A. Johnson, a farmer near here, announced that a milk thief had met his Waterloo at the business end of a farm mule. Johnson had planted the mule in the stall of a cow which the thief had been milking at night.

When the farmer reached the barn, shotgun in hand, he found a battered milk pail, a wrecked milking stool, a hat; but no thief.—Philadelphia Ledger.

YOUR ORGANIZATION

Many of our members are dormant—they consider they have joined—paid their fees or commissions and rest contented.

Without a doubt the Inter-State Milk Producers Association has done well by its members, and many non-members have profited by it, without the expenditure of one penny—and one cannot get cross at them for that—but they should be with us and aid the association with their moral and financial support.

Recently, with prices sagging and prospects of their market getting away from them, the value of the organization was prominently developed in several instances.

Why wait until such a time? Our own members should take an active part in obtaining a majority—yes a 100 per cent. membership at every receiving station, every shipping point in the Philadelphia milk shed.

Many of the little problems would settle themselves with a 100 per cent. membership. Co-operative efforts bring results and the better the co-operation the easier results. The association stands for a square deal for all, and to get it, in some instances, requires a majority representation.

Farmers now have a little spare time that could well be given to efforts to promote co-operation—that means full membership in your local. It's profitable work because it will bear fruit in the future.

Get busy now—if you want assistance your officers are here to give it to you. They will be on the job—hot or cold, rain, snow or sunshine. Give this some real conscientious thought—talk to your neighbor about it, get a few together in your immediate community, call a meeting, if you will, and let us help you out.

At all events get busy, and get busy now.

DAIRYMEN'S LEAGUE ELECTS OFFICERS

Following the annual meeting of the Dairymen's League, Inc., of New York, held at Utica, N. Y., December 8th, the directors elected at that meeting, met for organization and election of officers on December 21st.

The officers elected to serve for the ensuing year are as follows: President, George W. Slocum, Milton, Pa.; vice-president, John D. Miller, Susquehanna, Pa.; secretary, Albert Manning, Otisville, N. Y.; treasurer, B. M. Kilpatrick, Roxbury, N. Y.

The executive committee consists of George W. Slocum, chairman, ex-officio; H. J. Kershaw, Sherburne, N. Y.; R. D. Cooper, Little Falls, N. Y.; Albert Manning, Otisville, N. Y., and Paul Smith, Newark Valley, N. Y.

In these days of plentiful milk supply, buyers are inclined to be more and more critical of the condition in which their milk is received. Competition in the various milk products offered the public is keen, be it fluid milk for consumption or manufactured dairy products. Every effort is made to have these products of first quality and appearance.

To maintain a high standard buyers are carefully watching the source of their supply. Any defect, be it in quality, handling or shipping, is likely to result in the laying off of a shipper.

Every producer should make an extra effort to supply his milk buyer with pure, clean milk of the high quality.

LATEST MARKET PRICES

January Milk Prices

The Basic and Surplus Plan of purchasing milk in the Philadelphia territory again becomes effective with January. Under this plan the average quantity of milk shipped during October, November and December, will be taken as the "basic quantity" and be paid for at the basic price named. All milk in excess of the basic quantity will be paid for on the basis of 92 score solid packed creamery butter plus 20 per cent.

Subject to change whenever warranted by market conditions

F. O. B. Philadelphia

From these prices one cent per 46 quarts (or one cent per 100 pounds) is to be deducted by the buyer, which together with one cent per 46 quarts, contributed by the buyer, is to be turned over to the treasurer of the Advertising Campaign Committee for the purpose of carrying on a publicity campaign, advertising the food value and greater consumption of dairy products. The usual commission from the members of the Inter-State Milk Producers Association is to be deducted and returned to the Association as heretofore.

Basic Price	Test	per	Basic Price	Test	per
Per cent.	100 lbs.	quart	Per cent.	100 lbs.	quart
3.1	3.28	7.1	3.1	3.28	7.1
3.2	3.36	7.2	3.2	3.36	7.2
3.3	3.40	7.3	3.3	3.40	7.3
3.4	3.44	7.4	3.4	3.44	7.4
3.5	3.48	7.5	3.5	3.48	7.5
3.6	3.52	7.6	3.6	3.52	7.6
3.7	3.56	7.7	3.7	3.56	7.7
3.8	3.60	7.8	3.8	3.60	7.8
3.9	3.64	7.9	3.9	3.64	7.9
4.0	3.68	8.0	4.0	3.68	8.0
4.1	3.72	8.1	4.1	3.72	8.1
4.2	3.76	8.2	4.2	3.76	8.2
4.3	3.80	8.3	4.3	3.80	8.3
4.4	3.84	8.4	4.4	3.84	8.4
4.5	3.88	8.5	4.5	3.88	8.5
4.6	3.92	8.6	4.6	3.92	8.6
4.7	3.96	8.7	4.7	3.96	8.7
4.8	4.00	8.8	4.8	4.00	8.8
4.9	4.04	8.9	4.9	4.04	8.9
5.0	4.08	9.0	5.0	4.08	9.0

When the milk is not tested the price f. o. b. Philadelphia is 8 cents per quart

RECEIVING STATION PRICES

Less Freight and Receiving Station Charges
From this date quotations will include a deduction of one cent per 100 pounds which amount, together with one cent per 100 pounds, contributed by the buyer, is to be turned over by each buyer to the treasurer of the Advertising Campaign Committee for the purpose of conducting a publicity campaign advertising the food value and greater consumption of dairy products. The usual commission from the members of the Inter-State Milk Producers Association is to be deducted and returned to the Association as heretofore.

	Miles	Freight Rate of 110¢ of 46 quarts plus 4% war tax	Basic Quantity Price per 100 lbs.
1 to 10 incl.		.27	\$2.27
11 to 20 "		.28	2.28
21 to 30 "		.29	2.29
31 to 40 "		.30	2.30
41 to 50 "		.31	2.31
51 to 60 "		.32	2.32
61 to 70 "		.33	2.33
71 to 80 "		.34	2.34
81 to 90 "		.35	2.35
91 to 100 "		.36	2.36
101 to 110 "		.37	2.37
111 to 120 "		.38	2.38
121 to 130 "		.39	2.39
131 to 140 "		.40	2.40
141 to 150 "		.41	2.41
151 to 160 "		.42	2.42
161 to 170 "		.43	2.43
171 to 180 "		.44	2.44
181 to 190 "		.45	2.45
191 to 200 "		.46	2.46
201 to 210 "		.47	2.47

Freight rates deducted on a basis of 46 quarts—113 per cent. of 40 quarts, plus 3 per cent. war tax. Four-tenths of a cent added or deducted for each tenth of one per cent. butterfat above or below 3 per cent.

MONTHLY PRICES OF GRADE B OR MARKET MILK

F. O. B. Philadelphia and at receiving stations in the 50 mile zone, at 3 per cent. butterfat. Four cents being added or deducted for each one-tenth per cent. fat above or below 3 per cent.

	F. O. B. per quart Phila.	Receiving station 50 mi zone per ew
1920		
January	8.1	3.21
February	8.1	3.21
March	8.1	3.21
April	8.1	3.21
May	8.1	3.21
June	8.1	3.21
July	8.1	3.21
August	9.1	3.67
September	9.1	3.61
October	9.1	3.61
November	9.1	3.61
December	8.1	2.68

1920	First half	Average
January	\$3.16	\$3.12
February	3.20	3.18
March	3.24	3.19
April	3.28	3.23
May	2.96	3.00
June	2.71	2.76
July	2.76	2.76
August	2.61	2.64
September	2.78	2.81

These prices are based on 120 per cent. of the average monthly or semi-monthly price of solid packed 22 score creamery butter, New York City. In May, June and July an increase of 10 per cent. and in August an increase of 5 per cent. in the basic quantity of milk shipped is allowed.

DECEMBER COMPARATIVE PRICES PAID PRODUCERS FOR MARKET MILK

Eastern Territory
4 per cent. butter fat, per 100 pounds
Philadelphia, 50 mile zone \$3.08
New York, 200 mile zone 3.18
Pittsburgh, outlying points 3.10
Baltimore, per gallon f. o. b. \$0.34 \$0.30

DECEMBER RETAIL MILK PRICES

Pasteurized and bottled
Subject to Board of Health Regulations
Grade B or Market Milk

Philadelphia	Quarts	Pints
New York	18	9
Pittsburgh	16	8
Baltimore	15	7
Pittsburgh	15	7

DECEMBER BUTTER PRICES

92 score solid packed creamery butter, cents per pound	New York	Phila.	Chicago
1	57	57	52
2	57	57	50
3	54	54	50
4	51 1/2	53 1/2	49 1/4
5	52	52	48 1/4
6	52	52	48
7	52 1/2	52 1/2	48 1/2
8	53 1/2	53 1/2	48 1/2
9	53 1/2	53 1/2	49 1/4
10	54 1/2	54 1/2	49 1/4
11	54 1/2	55	51 1/4
12	54 1/2	55	51 1/4
13	55 1/2	55 1/2	51 1/2
14	55 1/2	55 1/2	51 1/2
15	56	56	52 1/2
16	56	56	52 1/2
17	56 1/2	56 1/2	52 1/2
18	56 1/2	56 1/2	52 1/2
19	56 1/2	56 1/2	52 1/2
20	56 1/2	56 1/2	52 1/2
21	56 1/2	56 1/2	52 1/2
22	56 1/2	56 1/2	52 1/2
23	56 1/2	56 1/2	52 1/2
24	56 1/2	56 1/2	52 1/2
25	56 1/2	56 1/2	52 1/2
26	56 1/2	56 1/2	52 1/2
27	56 1/2	56 1/2	52 1/2
28	56 1/2	56 1/2	52 1/2
29	56 1/2	56 1/2	52 1/2
30	56 1/2	56 1/2	52 1/2
31	56 1/2	56 1/2	52 1/2

EASIER TO PREVENT CALF DISEASES THAN CURE THEM

Most calf ailments are due to improper feeding or insanitary conditions, or both. Keep the calf out of cold rains in winter as much as possible and provide a dry, well-bedded stall at night.

Provide Nature's tonics—exercise, sunshine, pure air, abundance of fresh water, and a variety of feeds—and there will be little need for medical attention. It is better to prevent the occurrence of disease than to be under the necessity of curing it afterwards.

Observe the calf at all times. If it should appear drowsy, feverish, stiff or sluggish, act quickly. Reduce feed at once, and the disorder may be in large measure prevented. Keep salt before the calf at all times. An abundant supply of fresh water should be available always.

Some of the commoner ailments can be treated by following instructions which are contained in various bulletins and publications of the U. S. Department of Agriculture. In case of serious illness, consult a competent veterinarian at once. Do not delay.

PERSONAL

Miss Myrtle L. Barger, who during the past season has been the official tester for the West Chester (Pa.) Cow Testing Association has severed her connection with that organization and becomes associated with the Philadelphia Inter-State Dairy Council, 723 Heed Bldg., Philadelphia, Pa., engaged in field work in connection with the educational campaign on the food value and greater consumption of milk being conducted by the Council.

BULL BRAND DAIRY-RATION

Made on a base of Dried Brewers Grain



Piersma
Anna Colantha
No. 252138

A BULL BRAND DAIRY RATION Cow

PEQUITSIDE Stock Farms, Canton, Mass., owners of Piersma Anna Colantha, feed Bull Brand Dairy Ration both for test and herd rations. It has enabled their record herd to produce its maximum flow of milk, kept the cows in prime condition and cut the cost of feeding. They consider Bull Brand Dairy Ration the best all around dairy ration they have ever used—barring none—their own mixture included.

99.1 lbs. of milk in one day
Piersma Anna Colantha has the remarkable best days' milk record of 99.1 pounds; 634.9 pounds of milk in seven days; 2657.2 pounds of milk in 30 days, and 122.59 pounds of butter in 30 days.

Bull Brand Dairy Ration helps every cow make new records because it is a scientific mixture of milk producing feeding stuffs built on a base of Dried Brewers' Grains, renowned for its favorable action in the secretion of milk.

Two quarts more a day from each cow

In any number of cases dairymen who have fed different feeds or "mixed their own" find that Bull Brand Dairy Ration averages them at least two quarts of milk more a day for each cow. While the extra cost of Bull Brand Dairy Ration over some feeds may be two cents more per cow per day, with milk selling at 7½ cents per quart, it yields them an additional profit of fifteen cents daily for each cow—or thirteen cents net.

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BULL BRAND FEEDS
FOR LIVESTOCK AND POULTRY



Larro-feed
Many Imitations Prove Its Superiority

How Much Milk Will it Produce?

That's what counts in buying your feed.
Not how much it costs but how much milk it produces.
How much profit it puts in the bank.

You will find that the extra milk you get from Larro pays not only the extra first cost, but makes you a nice profit besides. You can afford to pay three or four cents more to feed a cow when you get a quart or two more milk.

Remember, that no matter how much milk your cows are now giving, you are assured that with Larro they must give more—or you get your money back.

Write for the names of successful dairymen in your neighborhood who use Larro year after year for just one reason—because it makes more money for them.

The Larro Milling Company
Larroe Bldg., Detroit, Mich. (4)



"You Get More Milk or Your Money Back"

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INTER-STATE
Milk Producers Review
Inter-State Milk Producers Assn., Inc., Publishers
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MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS

they are the best and cheapest disinfectant known. Since they cost nothing and are essential to food production, why exclude them from the barn, hog pen and poultry house? Why not use them?

"It is important, therefore, during the winter months for the breeders and dairymen whose barns are defective in this respect, to place them in proper or at least better shape. It will pay to do it."

NOT MUCH TIME REQUIRED TO KEEP FARM-LABOR DATA

A record kept of farm labor does not require much time, yet it is often the means of saving labor costs. The labor records should show just how much labor and team work is required on each crop and the time in the season when it is used. They should show what proportion of the labor is devoted to work that produces an income and the amount that is consumed by odd jobs or unproductive tasks. This will enable the farmer to determine the number of days of man and horse labor necessary to produce an acre of any crop, or the care of any class of animals for a year. Thus he may be able to rearrange his system of management so that he can get along with less labor and at the same time maintain production.

A year's labor records show also just how much man power and horse power is necessary to run the entire farm at different seasons, and point out accurately just when the rush seasons occur. With such records before him, the farmer knows approximately what his labor requirements will be in advance of the rush season. He is able to increase or decrease the different farm enterprises and fit them together until he has outlined a complete year's work with an even load of labor for the entire season.

FALL AND SPRING BEST TIME FOR KILLING POISON IVY

The work of eradicating poison ivy or poison sumac may be undertaken in the late fall or early spring with the least danger of poisoning. It is usually possible to find persons who are not easily poisoned by ivy or sumac who can be employed to remove the plants, but with the exercise of proper care almost anyone may undertake the work without incurring injury.

Overalls and heavy gauntleted gloves should be worn for protection while engaged in the work. Care should be taken in handling shoes and all articles of clothing that have come in contact with the plants, as the poison adheres to them and may make them a possible source of harm for an indefinite period.

The parts of the plants above ground are readily killed by spraying with strong brine (3 pounds of salt to a gallon of water), but additional sprayings are necessary to kill the new shoots that arise from the rootstock. A better method, especially for killing vines on fence posts and on trees, is to cut the poison ivy below the ground and then saturate the soil around the cut bases of the plants with salt brine.

Valuable eradication hints, as well as much information concerning the plants and the treatment for their poison, are contained in Farmers' Bulletin 1166, copies of which may be had upon request of the United States Department of Agriculture, Washington, D. C.

A FARM LIMERICK

A farmer once called his cow zephyr.
She seemed such a gentle young hephy,
But when he drew near
She kicked off an ear,
And now he is very much depyhr.

DECEMBER MILK CONDITIONS

(Continued from page 1)

ducer will, however, be slightly less, owing to the fact that basic and surplus plan will be effective and the price received will in the aggregate, be dependent upon the relative amount of basic and surplus milk made by each producer.

The butter market, while weak at times, has been fairly regular. Statistics from the Bureau of Markets recently available are interesting. The holdings of creamery butter were:

December 1, 1920.....79,889,000 lbs.
December 1, 1919.....73,654,000 lbs.
Increase 1920.....6,235,000 lbs.

The holdings of packing stock butter were as follows:

December 1, 1920.....3,206,000 lbs.
December 1, 1919.....2,098,000 lbs.
Increase 1920.....1,108,000 lbs.

Imports of butter continue comparatively heavy. During November 21,409 casks and 1,350 boxes arrived from Denmark. In the first three weeks of December, 12,070 casks and 976 boxes had been received from Denmark, while apparently 11,000 casks are afloat. Danish butter has recently been offered at 50 to 50½ cents, New York.

PHILADELPHIA SURPLUS PLAN

Beginning with January the Philadelphia Basic and Surplus Plan again becomes effective. The basic standard is represented by the average amount of milk shipped during October, November and December, 1920. The quantity of milk shipped, by any producer, in excess of his basic quantity, is considered surplus and will be paid for by buyers on a basis of the average monthly price quoted for 92 score solid packed creamery butter, at New York City, plus a differential of 20 per cent. of that price. This basis applies during January, February, March, April and September. In May, June, and July an increase of 10 per cent. and in August an increase of 5 per cent. in the basic quantity is allowed.

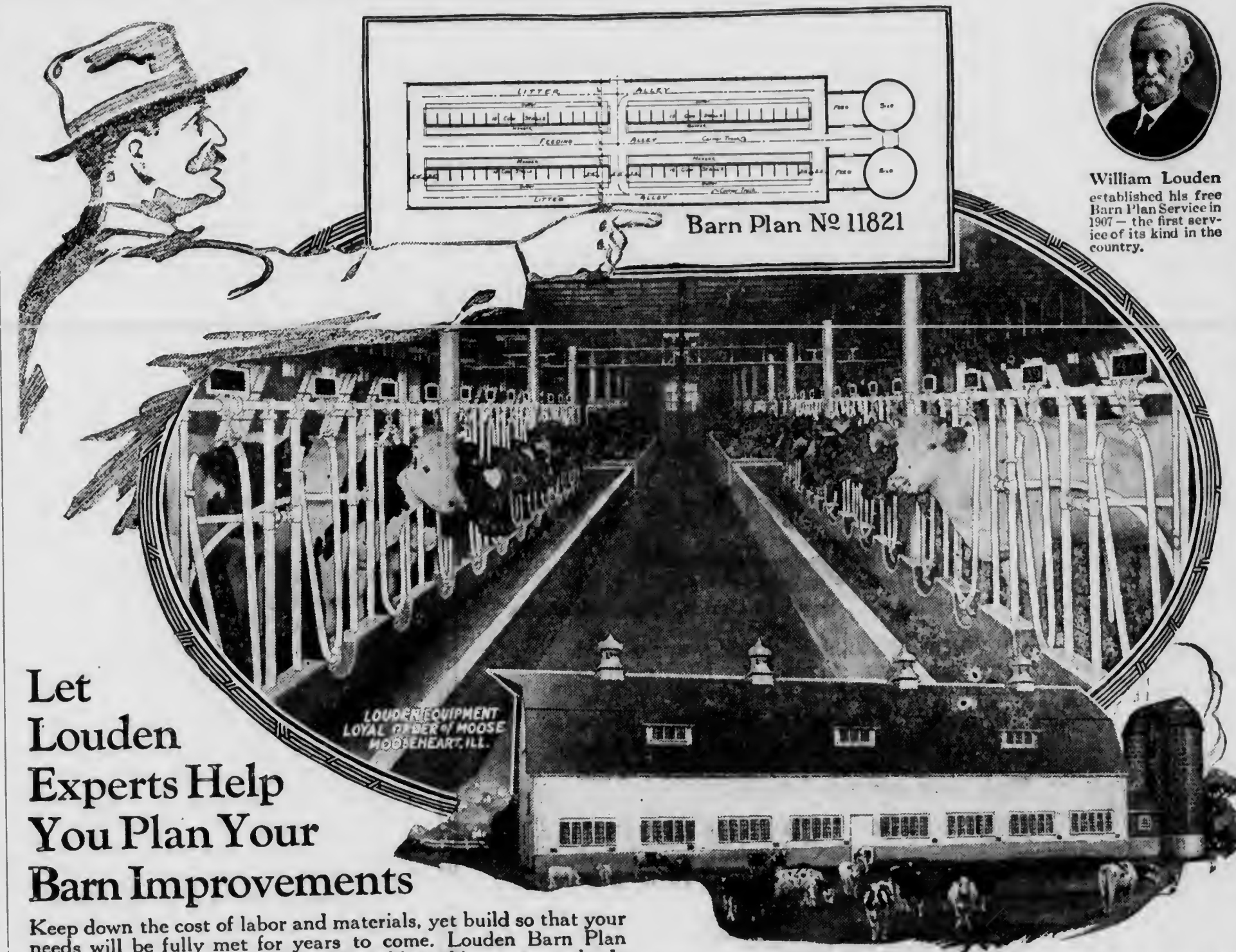
The plan operated quite successfully during 1920, and will, it is believed, be even more successful during the current year.

CO-OPERATIVE MARKETING

Co-operative marketing has resulted successfully for the cattle and hog growers of Craighead County, Ark. Cattle formerly sold at \$3 to \$6 a hundredweight under St. Louis markets, and hogs at \$2 to \$7 per hundredweight below the market. A carload of 94 hogs was originally collected and shipped through the activity of the county agent of the United States Department of Agriculture, and brought from \$5 to \$11 above the local price. The local buyers are now paying approximately the St. Louis prices.

The Blair County (Pa.) Farm Bureau will hold its annual meeting at Harrisburg, Pa., on January 13th, 1921. Representatives from every local of the Inter-State Milk Producers Association, in Blair County will be in attendance. H. D. Allebach, vice-president of the Inter-State Milk Producers Association, will make addresses at both morning and afternoon sessions.

The Montgomery County Farm Bureau will hold its annual meeting at Norristown, Pa., on January 20th, 1921. Representatives from the Inter-State Milk Producers Association will attend and make addresses.



Barn Plan No 11821

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Keep down the cost of labor and materials, yet build so that your needs will be fully met for years to come. Louden Barn Plan Service does away with costly and trouble-making guesswork. It gives you a well balanced barn in which every detail is made to contribute its full share toward the daily saving in chore work, convenience, and the health and comfort of the stock.

Write us what kind of a barn you have in mind, the number and kind of stock to be housed. Our barn plan experts (the strongest organization of barn building specialists in America) will work out

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Louden Stalls and Stanchions save time and labor in handling cows morning and evening. Loudon Built-Up Manger Curb eliminates feed waste. Loudon Litter Carriers make barn cleaning a matter of minutes instead of hours. Loudon Feed Carriers

a plan with suggestions that will exactly fit your conditions and send you blueprints. No charge or obligation.

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This 176-page illustrated catalog tells what seeds to buy, when and how to plant them. All the secrets of garden success. Send for it today.

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IMPROVE YOUR HERD

Cut Out the Boarders—With the high cost of feeds dairying is a close proposition. Replace the poor milkers with cows you raise yourself and know what they will do. The best for this purpose is

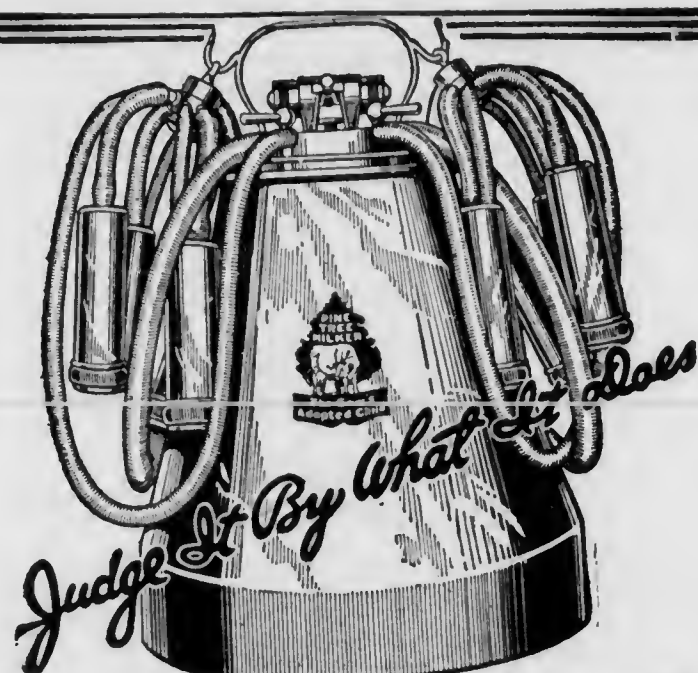
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Saves Milk Saves Calves
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Sold in spotted bags that hit the spot with calves.

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—W. C. Deakin, New Milford, Pa.

One man handles 3 double units and does his own stripping. Needs little care to keep clean on account of removable Pulsator. More than satisfied. Even better than claimed. Earnestly recommend Pine Tree to every dairy farmer.

Brief notes from enthusiastic letter from W. C. Deakin, prominent dairyman of New Milford, Pa.

Write for our "Book of Experience" in which 43 Pine Tree users tell how they made money by adopting this wonderful milker. Write today!

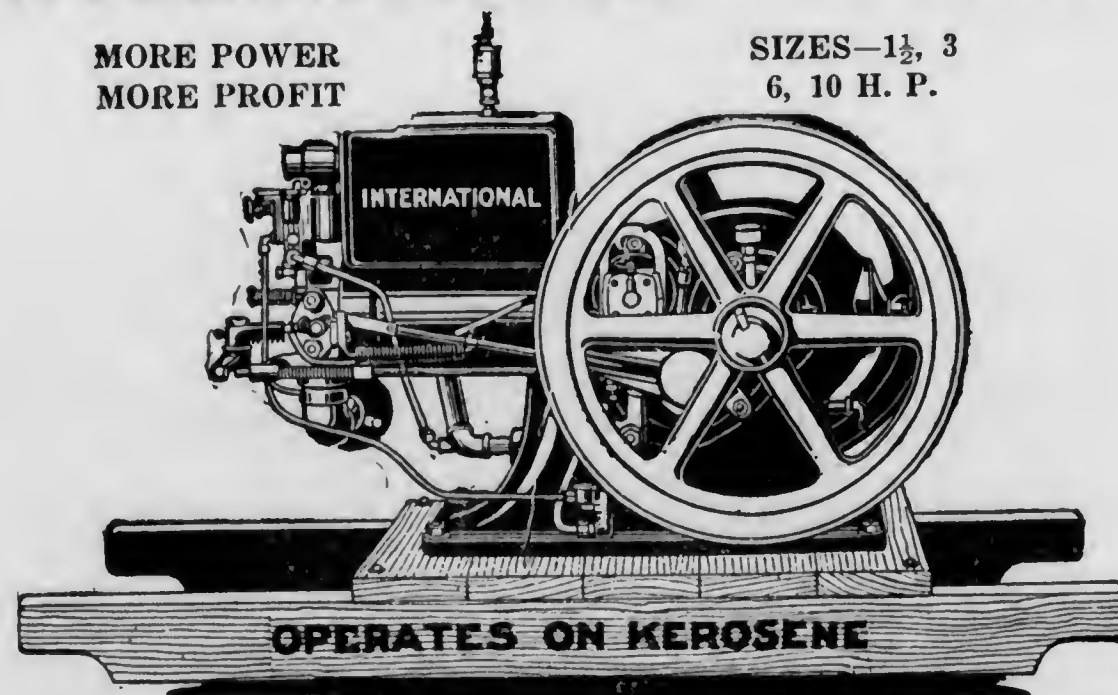
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NEIGHBORLY CHATS

Cyrus Noble Calls a Meeting of Milk Producers

Saturday night, December 28th, was a date which will be remembered for some time in the valley in which Cyrus Noble lived, for it was on that evening that the farmers of that community had the first real "get together meeting." Its success was largely due to the efforts of Cyrus Noble and his two sons, who had assured Winnie Blackburn, whose family they visited ten days previous, that they would spare no time in advertising the meeting. So enthusiastic were the junior Noble's that they would go out in the evening after doing the chores and urge every milk producer and his family to attend the meeting when modern methods of marketing milk, or marketing milk co-operatively, would be discussed.

By seven forty-five the old school house was filled with farmers and their families so that there was very little standing room.

The meeting was opened by Mr. Blackburn, who had influenced the Noble's to make the necessary arrangements. In the opening remarks Mr. Blackburn spoke of the benefits his community had derived from co-operative marketing, breeding and cow testing. After his brief remarks he introduced the speaker, a representative of a co-operative marketing association, who, by request had brought a stereopticon lantern and a number of slides. In the opening remarks he gave a brief outline of the workings of co-operative milk marketing associations, after which the lights were turned low and the pictures shown on the screen. So deeply interested was the audience that it seemed not a foot moved or an unnecessary sound uttered until the lights were turned on again. It may not have been so much what was said as the pictures they saw that aroused their interest.

After a bit of hesitating a host of questions were asked relative to the market conditions and the possibility of more economical production. When the appeal for membership to this co-operative milk marketing association was made not a person denied that it was the proper move to make yet they hesitated until Cyrus Noble stood up and said, "men if we ever hope to receive a square deal we must organize, so let's go to it." This "broke the ice" and as Noble started up front to be the first member from his district, it seemed that he just lead his neighbors to follow suit. While a lively discussion was carried on among the producers one by one they followed Noble's example and pledged their support to the organization that had already done so much for the farmer. Some farmers left without "signing up" because of the lateness of the hour while others were so deeply interested that they just "stayed around" to ask more questions regarding the benefits of cow testing and breeding associations.

Before the meeting adjourned, officers were elected and a local branch of this co-operative marketing association organized. As the farmers parted there were exchanged remarks which proved that they were all satisfied that they had taken a step in the right direction. There was no happier man, however, than Cyrus Noble, for he had the satisfaction of knowing that he had, through the encouragement from Mr. Blackburn, become a leader in his community, which is the greatest asset in any community. Yet in his modesty, his parting words

to Blackburn were; "Winnie you deserve all the credit for the success of this meeting. I am very happy to know that you are interested enough in us to lead us into the organization through which we too can be benefited by the more modern methods of farming."

N. S. G.

THE ICE HARVEST

Milk producers should not neglect, where natural ice is available, to harvest a full supply for next summer's use.

Dairy farmers cannot place too much importance on their ice supply. Be sure the water from which the ice supply is obtained is pure. Be careful that there is no drainage from contaminated sources, such as barn yards, cess pools or refuse heaps.

An inexpensive ice house will usually serve your purpose. Forty-five cubic feet of space is necessary for one ton of ice. Ordinarily two tons of ice for each cow in the herd should be allowed. This quantity will be sufficient to cool the milk properly, allow for meltage and furnish enough for family needs. Where cream only is sold, about one-third the quantity named will be needed.

Cooling the milk properly on the farm, will overcome considerable loss by souring or high bacteria count. Natural ice can be harvested by most milk producers and the work can be done during the slack winter season.

Farmers Bulletin No. 623—Ice Houses and the Use of Ice on the Dairy Farm, and No. 1078, Harvesting and Storing Ice on the Farm, give interesting information and data on this subject. They can be obtained by applying to the Division of Publications, Department of Agriculture, Washington, D. C.

THE LESLIE PLANT CHANGES OWNERS

The receiving station of the Kelly-Lester Company, at Leslie, Md., has been sold, through the efforts of the officers of the association, to Dolfinger's Dairies, Philadelphia, Pa.

The Kelly-Lester Company notified its patrons and the Inter-State Milk Producers Association that the station would be closed on December 17th, 1920. Your association succeeded in having the plant kept open after that date, but on a butterfat basis, pending negotiations under way for the sale of the plant.

At the same time efforts to organize the farmers at that station, which had had but few members in the organization, were aggressively undertaken and resulted in the formation of the Bay View, Maryland, Local of the Inter-State Milk Producers Association, of which A. G. Smith, North East, Md., R. D. 2 was elected president and Charles H. Morris, of North East, Md., secretary.

On December 29th, negotiations for the sale of the station to Dolfinger's Dairies, Philadelphia, Pa., were completed and the new owners took possession January first 1921. Inter-State Milk Producers Association prices will be paid by Dolfinger's Dairies at this plant.

The West Chester Local of the Inter-State Milk Producers Association held its annual meeting in West Chester, Pa., December 10th. The following officers were elected to serve for the ensuing year: President, Philip Price, West Chester, R. D., succeeding Albert H. Hoopes; secretary, Thomas Smedley, and treasurer, Harry Pratt.

No farm home is complete without its local newspaper, its farm paper and its organization paper.

The Dairy Farmer's Future

(Continued from page 1)

per cent. above the average is not making more than a fair profit, how about the thousands who have much lower producing herds and no better market?

Many are losing money or are just "getting by" with the labor of women and children which is unpaid, by working for less than hired men's wages, by working too hard in order to save labor, and by denying themselves comforts, and even many things which are necessities to men in cities. These conditions do not make for a contented, prosperous, rural citizenship, such as this country needs to keep its farmers from becoming mere serfs.

An improvement in the methods of marketing and distribution so that the producer may receive a fairer share of the ultimate price of the product which he produces is the only other remedy available, and herein no doubt lies the most difficult problem. Under a discussion of better marketing methods comes naturally the subject of increased consumption. We have been poor salesmen in that we have not advertised our product and, consequently, the average consumer is ignorant of the value of our product and uses only about one-fourth as much as he should for health and economy. Many city people are using substitutes for butter, and so are many producers of milk, to the detriment of the dairy industry. Oleomargarine manufacturers are heavy advertisers and they even go so far as to say that "Margarine butters bread" and nobody comes out to say that only butter can butter bread. We are told that an increase in consumption of three table-spoons of milk per capita would take care of all our surplus and still we are not scratching the surface in an effort to increase consumption and are dependent on a decrease in price to do it for us when our product is already too cheap. Any other industry producing a product with the essential value of ours would spend millions to advertise it. Let's get busy. There is no substitute for milk and the average daily consumption of milk is too low to maintain health.

Up to 1916 we sold milk as individuals, often competing against our own neighbors. A most inefficient method. Since that time we have had collective bargaining, a big improvement, but who will say that we have reached perfection? We have only scratched the surface in securing more efficient marketing methods. Our collective bargaining associations have sold the milk consigned to them to sell by its members under very favorable circumstances during most of the period of their existence because of immense demand abroad for our manufactured dairy products. The prices received have reflected market conditions far more accurately than would have prices received under the old method of selling.

Now the situation is changing. We have a considerable surplus and it stands to reason that it will be increasingly difficult to secure a satisfactory price as long as such a surplus exists. Already we find plants closed in many territories and farmers without a market for their milk. It would seem that our efforts for more co-operation in marketing must be greatly increased. Collective bargaining has called for a minimum of co-operative on the part of the individual dairyman, and if we are to come nearer to a solution of our marketing problems we must very evidently have vastly more co-op-

(Continued on page 14)

WHY MILK BY HAND?

"She bellows for it just as if it were her calf."



"A girl sixteen years old does my milking. The cows are milking as well as by hand. One fresh cow bellows for it as if it were her calf." —HARRY J. GAMBLE.

Please Your Cows With A Perfection

DID you ever hear of a cow bellowing for a milking machine as if it were her calf? Owners frequently tell us that their cows actually bellow for the Perfection just as they do for their calves.

But is it any wonder? The Perfection's way of milking is so much like the calf's that it is called the perfect copy of the calf. The gentle suction followed by a downward squeeze, followed by a period of rest exactly duplicates the calf's milking.

You can please your cows with a Perfection. They will prefer to be milked by the Perfection rather than

by hand. Your boy or girl can milk with the Perfection as well as you can.

At the same time you are pleasing your cows you are pleasing yourself. Perfection returns its cost in less than a year in wages saved. It saves you time and drudgery. Your cows will like it. Contented cows mean more milk. Most owners find their cows give more milk when milked with Perfection. Why wait any longer? Get a Perfection.

Write For Booklet

Write for the booklet, "What the Dairyman Wants to Know." It tells in detail why Perfection milking means contented cows. We'll also send the names and address of the Perfection owners near you.

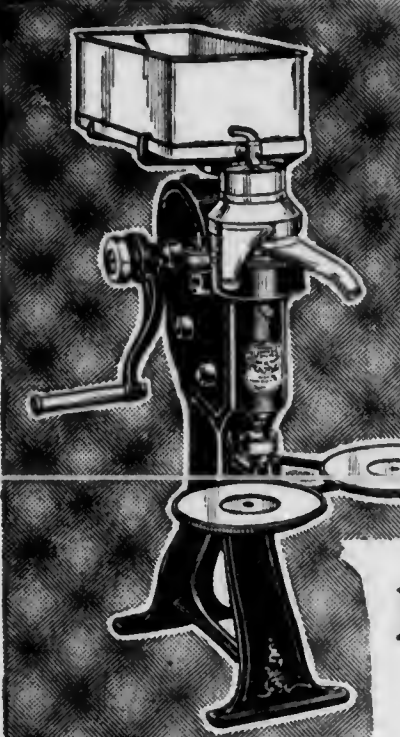
Why Milk By Hand? Cows prefer the Perfection.

Perfection Manufacturing Company

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PERFECTION MILKER



UNITED STATES CREAM SEPARATOR
WITH PERFECTED DISC BOWL

World's Record Skimming
Interchangeable Discs
Easy bowl to clean

Do You Value Ease of Cleaning?

Morning and evening—365 days a year—the same process. Maybe it has sometimes seemed to you the milk-separation was mostly "washing up."


The wash-up is one of the problems solved for you by the United States perfected disc bowl. No fussing with numbered discs to waste your time and try your patience. Washing and rinsing the interchangeable discs is done in a jiffy, and your separator is ready for the next run.

It is characteristic of United States precision that this marvelously easy-running bowl has been attained with interchangeable discs.

At every turn the United States meets you more than half way in labor-saving.

Write for catalog
Vermont Farm Machine Corporation
Bellows Falls, Vt.
Chicago, Ill. 53 W. Jackson Blvd. Salt Lake City Portland, Ore.

Crank on either side
One Piece Frame



Weigh the Feed—Weigh the Milk!

UNION GRAINS was the first ready-mixed, balanced dairy ration ever offered—and it's always been known as the biggest producer that ever came out of a feed bag.

The Hershey Chocolate Company's big herd of 2,000 cows have eaten it for years and the Hershey Company urges all the farmers whose milk it buys to use it. They want more milk. They want it produced as cheaply as possible. So they buy an average of four carloads of Union Grains every month. And they're the kind of people who know whether it pays or not!

Seventeen years of experience in mixing dairy feed goes into every bag. It's a work of real experts. You can't be sure that your own mixtures are the best you can do until you have tried Union Grains.

Write for a Union Grains Cost Sheet and know what dairy feed actually is costing you.


We also make Ubiko Stock Feed, Ubiko Pig Meal, Ubiko Buttermilk Egg Mash, Growing Mash, and Scratch Feed.

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BALANCED RATIONS
For All Farm Stock

UNION GRAINS



THE LACTANT MILKER

Here is an efficient milking machine that will milk clean and does not require stripping.

Write for prices and terms
Buckwalter Supply Co.
LANCASTER, PA.

44 SO. QUEEN STREET

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS

MORE FOOD VALUE FROM CORN AS SILAGE THAN OTHER CROPS

Almost any green crop can be made into silage successfully. Much care, however, must be taken to expel the air from such hollow stemmed plants as the small cereal grains by cutting fine and packing firmly. Other crops, of which legumes are examples, are deficient in the fermentable constituents needed for palatable silage. On the other hand, a few crops, such as the saccharine sorghums, have so much sugar that unless cut at a more mature stage they have a tendency to produce sour silage.

In most parts of the United States more food material can be obtained from an acre of corn as silage than from an acre of any other crop that can be grown. Corn is more easily harvested and put into a silo than crops like rye, clover, cowpeas, or alfalfa, and when cut for silage the maximum quantity of nutrients is preserved. Experiments have shown that corn, when silaged, lost 15.6 per cent of the dry matter, against 23.8 per cent when cut for fodder and cured in the field. Moreover, there is less waste in feeding silage than in feeding fodder, since good silage properly fed is all consumed. When corn is cut for silage the land is cleared and left ready for another crop sooner than when the corn is shocked or is husked from the standing stalk. Corn can be put into the silo at a cost not above that of shocking, husking, grinding and shredding.

Farmers' Bulletin 578 on The Making and Feeding of Silage may be had by addressing the United States Department of Agriculture, Washington, D. C.

FOOD VALUE OF APPLES

By Pearl McDonald, Extension Department of Home Economics, State College, Pennsylvania

Long ago people learned by experience and observation that apples are a wholesome and valuable food and those who used them freely in the diet were usually in good health. We now know why this is true. From the studies of nutrition specialists we have learned what the apple and other fruits contain and how they meet certain food needs of the body. Fruit furnishes mineral matter such as iron, phosphorus, etc., which is necessary in regulating the digestion and absorption of food; elimination of waste products and other processes such as the building and maintaining the tissues.

Fruits contain acids and characteristic flavors which make them a desirable food. They stimulate the appetite and give variety as well.

Apples furnish a considerable amount of sugar in a desirable form. Sugar serves as fuel in the body nutrition. If people used apples generously, they would need little additional sweets in the form of sugar. For children, this is important because fruit sugars are better than cane sugar for them. There would be less trouble with decaying teeth if children ate less candy and more apples.

Nutrition specialists recommended fruit juices for the growing baby as soon as they can be given such as apples, oranges and prunes. Throughout the growing time of the child's life, the apple will be found a valuable part of the diet.

Because of the food values as given above the apple should be used more generously in the diet. In a year of plenty, the apple is one of the most economical fruits to use.

Modern Dairy Practice In Chester County, Pa.

Some interesting data has been compiled by Miss M. L. Barger, tester for the West Chester Cow Testing Association, concerning equipment and general conditions in twenty dairy barns in that district. The West Chester Cow Testing Association is the largest in the State of Pennsylvania.

Of 620 cows that were tested, fifty per cent, of which were pure bred, one hundred and nineteen had advanced registry or registry of merit records. In this association, which consists of twenty herds, there are 35 silos. Fourteen farms have separate houses or rooms for handling milk which are apart from the stable in which the cows are housed. Twelve barns are electrically equipped, having lights, etc.; seventeen have concrete floors; twelve have their stables equipped with individual drinking cups. In eight of the twenty dairies, milking machines are used. Official tests are being conducted at eight dairies at the present time. There is one accredited herd; three herds have passed one clean test and two are working under the accredited herd plan and one tested by a local veterinarian.

The foregoing appears to emphasize two things—one, that Chester County is the home of advanced dairymen and second that the most progressive dairy-



Miss Barger and Pure Bred Holstein Heifer at the Westtown School Farm. The dam of this heifer is a high producer of 4.0 % fat milk.

men believe the cow testing association work is well worth while.

Many farmers who carry on the official testing use cow testing association records to know which cows are worth putting on official tests, others believe the records of the association, which are given considerable publicity through the press and organization papers, are one of the best means of advertising their animals, but the primary object of the work is to find the true value of the individual cow and thus be able to weed out the "star boarders."

In these days of high feed and labor costs, uncertain milk prices and high feed and labor costs, it is especially important that every cow "pay her way" and give ample returns in milk for every pound of feed consumed.

One Chester County dairyman said, "Since I have joined the Cow Testing Association, I have sold 20 cows and I am now making more money on 40 cows than I made before with a herd of 60." Is there any further proof necessary that the cow testing association is not a whim, but a real, dollars and cents business proposition?

Miss Myrtle L. Barger, who has been the official tester of the West Chester Cow Testing Association, is shown in the accompanying illustration, together with a \$300 Chester County Holstein heifer.

Condensed and Evaporated Milk Market For December

The United States Bureau of Markets reports that the demand for condensed and evaporated milk during November and early December was very little better than previously reported. Manufacturers report that the jobbing and retail trade are purchasing according to current consumptive demands, which in certain sections, especially the South, were greatly limited by the tight money situation and distressed agricultural conditions. Most manufacturers report a gradual decrease of their held stocks. There is very little, if any, active stock buying on a large scale, and some large exporters reported an 80% decrease in their export shipments. There has been some inquiry from France and Germany. A number of firms are handling the milk received to the account of the producers, while others still have their factories closed.

The prices paid to producers show a rather wide range in different sections and the average for the month of December is approximately 20 cents per hundredweight less than November. Stocks of condensed and evaporated milk in the hands of manufacturers on December 1, had been sealed down somewhat from those on November 1, but still are rather large, especially unsold stocks of bulk condensed milk which showed an increase on December 1 of nearly 300 per cent. over the stocks on November 1.

The price of sweetened condensed bulk skimmed milk was quoted as low as \$6 per hundredweight in some sections, which barely covers costs of sugar, barrels and factory operations, to say nothing of the cost of the skim milk used. A wide range was given for the prices of sweetened condensed and unsweetened evaporated case goods, the higher prices applying to advertised brands while in most instances lower prices were reported for unadvertised brands.

It would be problematical to attempt to state when present conditions in the condensed and evaporated milk industry will again become normal. The prevailing limited extension of credit to jobbers and wholesale dealers has tended to restrict their purchases to smaller quantities, and the tendency of consumers generally to economize in purchases of all kinds has resulted in curtailed consumption of condensed and evaporated milk. These factors, together with the decrease in export demand, have resulted in an overstocked market from which the industry is now trying to relieve itself.

DELAWARE GRANGE ACTIVITIES

Charles Hopkins, Kent County, Del.

At annual State Grange, Master J. H. Rosa, in his address, urged farmers to co-operate extensively. He suggested that the grange work for improved waterways as a means of combating high freight charges. Several of the grangers attacked the gunning laws, claiming foreigners shoot promiscuously without regard for the game laws.

The report of the secretary showed 86 subordinate granges with membership of 2400. The sixth degree was conferred on a large class. Committee on legislation recommended the country needed not more legislation but a clarifying and enforcement of the laws. J. H. Rosa was re-elected master; H. H. Short, overseer and E. A. Evans, lecturer.

—Exchange.

One Way to Save Feed

Your own grain ration may be getting every pound of milk out of your cows that they can give.

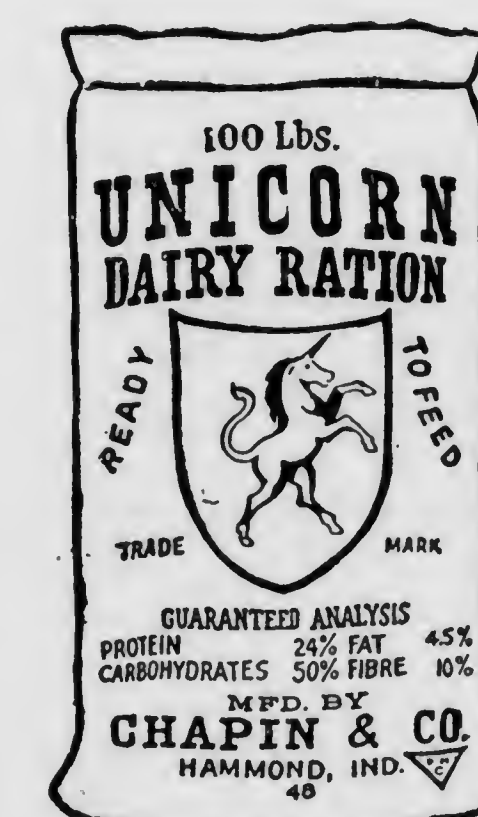
But have you figured feed against milk?

You may be astonished to find that for each dollar you spend for feed you are getting a return of only \$2 or \$3 in milk.

Where Unicorn is fed, \$1 paid for feed brings you a return of \$4 or \$5 in milk.

Your own ration may be getting the milk, but it is not getting the profit.

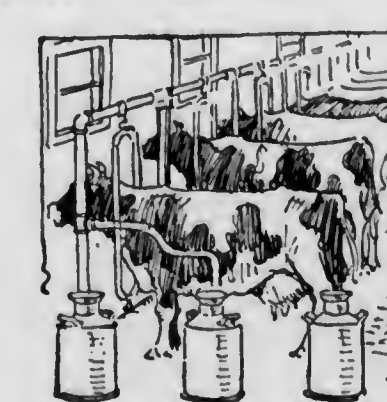
Change to Unicorn. Get the same amount of milk, with less money spent for feed. The saving is clear profit.



A McHenry County (Ill.) herd of 23 grade cows produced \$743 worth of milk from \$164 worth of Unicorn, fed straight.

CHAPIN & COMPANY

Chicago
New England Office at Boston



DAIRYING PAYS If You Feed

International Special Dairy Feed At the New Rock-bottom Price

We have slashed the prices on International Feeds both ways from the middle. Of course we are taking a loss, but we are ready to do this to play the game with the thousands of feeders who have so wholeheartedly approved International Feeds for years.

Don't take the price drop in your dairy products too seriously. The cut we have made in price on International Special Dairy will allow you to feed it at the same old good margin of profit. Same feed, same quality, at a smashing drop in price.

International Special Dairy Feed Is Guaranteed to produce more milk than any other feed of similar analysis. You should get two more quarts of milk per day from each cow.

Remember that this feed is priced down to produce milk at a profit on the prices you secure. Write us direct for full information if you have no International dealer near you.

LIVE AGENTS WANTED—A live agent can quickly sell several cars of feed in each vicinity at this new, low price. Write for details.

INTERNATIONAL SUGAR FEED CO. Minneapolis, Minn. Mills at Minneapolis and Memphis

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS

CRAINE TRIPLE WALL SILOS

THE STRONGEST, HANDSOMEST SILO MADE

Invariably chosen by architects on fine estates, not only for beauty but for strength. The Craine will withstand the severest tests of weather and weight, because of its triple-wall construction. Inside—upright

staves; closely fitted; around these is heavy, water-proof, frost-resisting, Silafelt; outside is the handsome, protective spiral Crainelox covering that binds the whole silo into one compact, permanent, rain-proof, frost-repelling, leak proof structure that keeps the silage from freezing and spoiling and saves expense. You can rebuild your old silo into a Craine silo at half the cost of a new silo. Write today for full particulars. Terms and agency offer. CRANE SIO CO. Box 230 Norwich, N. Y.

LEWIS LINSEED CAKE

The compressed feed will keep your cows in good flesh and will increase the milk flow.



LINSEED CAKE MEAL

Has the same Fat and Protein content as the Linseed Cake—but it is already ground.

We'll be glad to take you through our Plant where these feeds are made. Write us if you are interested.

John T. Lewis & Bros. Co.

705 Lafayette Building

Philadelphia

"THE PRICE OF MILK"

By CLYDE L. KING, Ph.D.
Formerly

Chairman, Governors Tri State Milk Commission (Pennsylvania, Maryland, Delaware), Federal Milk Commissioner for the Eastern States, Milk Price Arbitrator for the State of Pennsylvania.

Comprehensive Treatment of the Milk Industry in All Its Phases

NOW READY FOR DISTRIBUTION

Every Dairy Farmer Should Have a Copy of This Book

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Endorsed by Herbert Hoover, former Food Administrator; John LeFebvre, International Milk Dealers Association; Margaret H. Boden, Chm. Food Section, Philada. Fair Price Commission; R. W. Balderston, Secty. Inter-State Milk Producers Association.

ORDER YOUR COPY NOW

Price \$2.00 Delivered

FOR SALE BY

The Inter-State Milk Producers Assn.

721 Heed Bldg., Philadelphia

ACCREDITED HERD LIST No. 3

Accredited herd list No. 3, just issued by the United States Department of Agriculture, is the official record of progress in tuberculosis eradication under the accredited herd plan. So extensive has the work become that the list of accredited herds, together with summaries, requires 52 printed pages. And this does not include herds which have successfully passed one official tuberculin test with a view to being accredited. Such herds are listed in two supplements to the main list. Supplement 1, containing 98 pages, lists herds of the Ayrshire, Guernsey, Holstein-Friesian, and Jersey breeds. Supplement 2, containing 50 pages, includes one-tested herds of the Aberdeen-Angus, Brown Swiss, Devon, Dutch Belted, Galloway, Hereford, Red Polled, and Shorthorn breeds.

Altogether the number of accredited and one-tested herds is approximately three times as many as recorded in Herd List No. 2, issued last year.

Accredited Herd List No. 3 is now ready for distribution, and may be obtained on request from the Bureau of Animal Industry, United States Department of Agriculture. The two supplements will be ready for distribution about December 15, and persons desiring either or both of the supplements may apply to the bureau which will send those lists as soon as they are received from the printer.

Arranged according to number of accredited herds, the various states co-operating with the Federal Bureau of Animal Industry in bovine-tuberculosis eradication are shown in the accompanying table:

State	Accredited herds	One-tested herds
1. Minnesota	49	994
2. Virginia	354	591
3. Wisconsin	287	835
4. Pennsylvania	261	639
5. District of Columbia	190	94
6. North Dakota	172	936
7. Maine	127	941
8. Indiana	121	392
9. North Carolina	105	1,045
10. Ohio	104	714
11. Maryland	103	261
12. Michigan	103	133
13. Tennessee	86	292
14. Kansas	80	81
15. Illinois	70	293
16. Vermont	63	1,343
17. Mississippi	59	288
18. Kentucky	55	270
19. Montana	48	97
20. New York	47	186
21. Iowa	44	377
22. Utah	36	377
23. South Carolina	34	183
24. Alabama	34	79
25. Oregon	30	263
26. West Virginia	29	763
27. Nebraska	29	205
28. Louisiana	28	153
29. New Jersey	28	21
30. Florida	21	1,295
31. Massachusetts	21	34
32. Connecticut	18	58
33. Washington	16	264
34. South Dakota	15	124
35. Arkansas	14	53
36. Delaware	10	45
37. Idaho	8	526
38. Georgia	8	180
39. New Hampshire	7	30
40. Missouri	6	585
41. Rhode Island	5	107
42. Nevada	1	29
43. Oklahoma	1	228
44. Texas	1	51
45. Colorado	2	2
46. Wyoming	1	1

New Low Quotations Recorded For All Feedstuffs

Very poor export demand for high protein feeds caused a decline of several dollars per ton in these commodities. Other feedstuffs declined in sympathy, and practically all registered new low records for the year. The usual holiday dullness and stock taking at this season of the year are reasons given for the unimproved demand which several sections report as lighter than last week.

The trade in general reports lack of interest by their customers and does not look upon conditions as favorable for much change in the near future because of the continued use by feeders of locally produced grain and forage.

Flour Middlings Down \$2 to \$3

Wheat mill feeds.—While production did not improve, the fact that offerings exceeded the demand caused a further reaction, particularly in heavy wheat feeds which are practically unsalable. Red dog and flour middlings declined from \$2 to \$3 per ton, bran and middlings \$1 to \$1.50. Stocks of wheat feeds generally are given as ample and in many sections are said to be above normal, due to the fact that consumption has been very light. Western resellers and jobbers, in order to make sales, were obliged to discount the market.

Cottonseed meal and cake.—Cottonseed meal is draggy and hard to sell, although the prices are much lower than last week. The trade reports finding difficulty in having buyers accept feed bought sometime ago. There is an absence of export inquiry and the fertilizer trade does not appear interested. Stocks are large. Quotations given in many markets are nominal asking prices, and bids of \$2 per ton under these quotations enabled buyers to obtain their supplies.

Linseed meal.—The trade reports a fairly good demand for linseed meal in mixed cars. Offerings are heavy and sales were made during the week at \$43.50 Philadelphia and \$41 delivered Chicago. Conditions in the Northwest are quiet. No snow of any consequence has fallen in that section as yet and farmers are reported as grinding and feeding small grains. In the Northeast, the demand was dull and stocks large.

Gluten feed.—Manufacturers of gluten feed report the situation as unchanged from the past two weeks. Several mills are shut down and those operating are running about 50% capacity. Improved production is expected after the holiday season. Prices are unchanged and the demand is fairly good.

Hominy feed.—The demand for hominy was light. Buying is mostly for prompt shipment. Price remained steady. Stocks are light though ample. Offerings are light. Cincinnati reports a good demand at slightly higher prices from last week. Baltimore reports the demand as fair and the price steady.

Alfalfa Meal Demand Light

Alfalfa meal.—Most of the markets report alfalfa meal as selling under quotation for the same grade of hay. Offerings are good but the demand is light as feed manufacturers lack orders for ready ration feeds. The price tendency was easier, due to the decline in hay prices.

Beet pulp.—Beet pulp sold slowly during the week but quotations were unchanged. Foreign beet pulp is offered in seaboard markets at from \$48 to \$49.50. Domestic offerings were freer.

Other feeds.—Reground oat feed \$12.50 Chicago. Flour middlings \$29.50, red dog \$38.50, Minneapolis.

—Market Reporter, Dec. 25th, 1920.

PHILADELPHIA DAIRY COUNCIL

(Continued from page 1)

As an aftermath of our recent annual meeting, we have received from one of our members at West Grove, Pa., a communication which reads in part, as follows:

"Mr. Cope, after his return from the meeting, told me of the attention given the resolutions regarding the advertising of milk, sent some time ago by the West Grove Local, and the campaign that was organized. It knocked the breath out of me—we anticipated a long propaganda. The fact that you have been able to put through so quickly, a plan that enlists all the milk interests, consumers and public, is bigger than we hoped for. In addition, it shows how fast things are moving in our line."

PENNSYLVANIA STATE DAIRY COUNCIL MEETING

The Pennsylvania State Dairy Council held a meeting for future organization and outlining of a working plan, on December 22nd, at Harrisburg, Pa.

Members of the council present, included representatives from Erie, Scranton, York, Pittsburgh, Meadville, West Chester and Philadelphia. Nearly every one of the dairy organizations and interests in the State were present.

The council accepted the proposition of the Philadelphia Inter-State Dairy Council to take over the active local work within its territory, leaving the state-wide questions, such as legislation and organization to the State Dairy Council, with the thought that the Dairy Co-operative Sales Company and the dealers in Pittsburgh and vicinity would effect an organization similar to the Philadelphia Inter-State Dairy Council in that territory.

Dale R. Andrews, West Chester, Pa., who had been serving as secretary-treasurer of the State Dairy Council, owing to the press of other matters, withdrew as secretary but retains the treasurer-ship.

R. W. Balderston, secretary of the Philadelphia Inter-State Dairy Council, and also secretary of the Inter-State Milk Producers Association, was elected secretary of the Pennsylvania State Dairy Council, and will have offices in the Heed Building, Philadelphia, Pa.

The executive committee of the State Dairy Council includes the following: Chas. F. Jenkins, president; E. M. Bailly, vice president, Dale R. Andrews, treasurer; R. W. Balderston, secretary; Dr. Clyde L. King, M. T. Phillips, and C. R. Linback.

COMMISSIONS FOR 1920

During the current month bills for unpaid commissions on milk sold by members of the Inter-State Milk Producers Association, other than those collected regularly through the various dealers, manufacturers of condensed milk, etc., will be sent to the various members. A large number of "direct shippers" are billed once each year, this plan being considered the easiest and causes less confusion of accounts.

We would kindly request that all who receive bills remit promptly. If the amount billed is not correct according to your respective accounts of milk shipped, communicate with the office of the Inter-State Milk Producers Association and necessary adjustments will be made.



Designed with consideration for the cow and in observance of the principles of milk secretion

Built to De Laval Standards

Backed by De Laval Service

Its Uniform Pulsations Please the Cow

A Better Way of Milking

LONG ago the De Laval Company realized there is no more reason for hand milking than for harvesting a grain crop by hand. But designing a milker was not simply a problem in mechanics. A successful mechanical milker must work in harmony with the delicate organism of a living cow.

After many years of thorough research and test, and after four years of commercial use, the De Laval Milker has proved itself to be a better way of milking.

Now the many De Laval users are practically unanimous in their agreement that it not only saves time and eliminates drudgery, but actually increases the flow of milk.

The De Laval will make your dairy business more profitable and pleasant. Write for full information.

THE DE LAVAL SEPARATOR COMPANY
NEW YORK CHICAGO SAN FRANCISCO
165 Broadway 29 E. Madison Street 61 Beale Street

Sooner or later you will use a
De Laval
Milker or Cream Separator

HARDER SILOS

Many Harder Silos are old enough to vote

Many Harder Silos erected 20, 21 and 22 years ago, are still giving perfect service. We have letters from our first customers saying so.

This is because the strong Harder staves are interlocked by projecting two-inch galvanized spline dowels and by the use of dowel pins. The Harder is also securely anchored to the foundation.

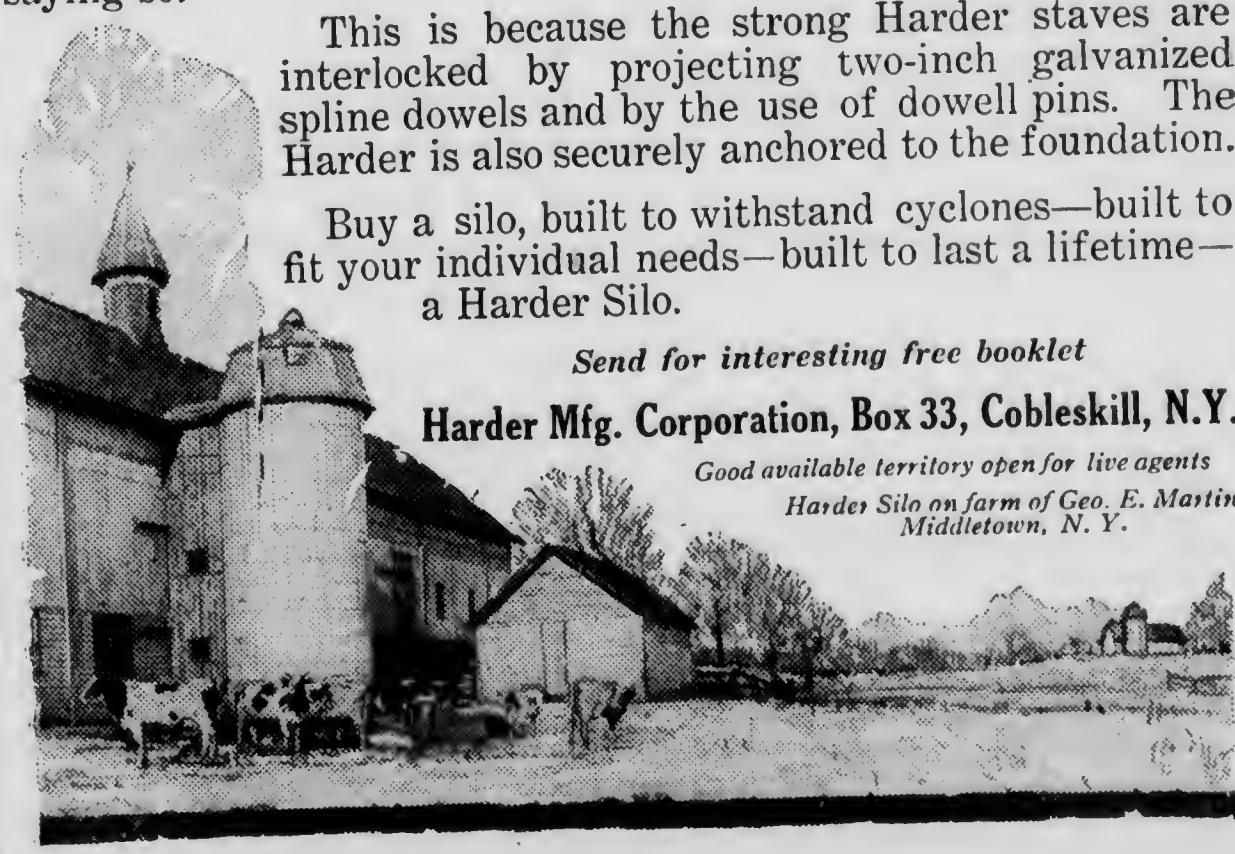
Buy a silo, built to withstand cyclones—built to fit your individual needs—built to last a lifetime—a Harder Silo.

Send for interesting free booklet

Harder Mfg. Corporation, Box 33, Cobleskill, N.Y.

Good available territory open for live agents

Harder Silo on farm of Geo. E. Martin, Middletown, N.Y.



Green Mountain SILOS

STABILITY COUNTS

Your Green Mountain Silo, with the popular hip roof, will never need an apology. It is built to stand up permanently—just as any other farm building is expected to do. Every groove and joint is made to fit tight—both for permanence and silage protection. Every stave is treated in creosote preservative. Hoops are of extra heavy steel with rolled (not cut) threads. They cost us more but they stand unusual strains. Doors fit like a safe—always tight. Wooden ladder rungs; no iron to frost the fingers. Green Mountain Anchorage system holds silo absolutely firm and upright. A beautiful silo—with nut-brown side walls and bright red cedar roof. Write today for detailed circulars. Special inducements for early orders.

CREAMERY PACKAGE MFG. CO.
335 WEST STREET, RUTLAND, VT.

Will It Stand? YES

Milking Time Tells The Health Story

How often have you wondered why—in spite of the best of feeding and general care—some certain cow kept falling far below her normal milk yield?

Nearly always such a cow is suffering from lost vitality of her milk-making organs. Get a package of Kow-Kare and follow directions. You'll see a quick return to full production, because Kow-Kare acts directly on the milking cow's producing organs.

In cases of Barrenness, Abortion, Retained Afterbirth, Scouring, Lost Appetite, Bunches, you'll find the Kow-Kare treatment a reliable aid in restoring complete health.

Sold in 70c and \$1.40 packages by feed dealers, general stores and druggists.

DAIRY ASSOCIATION COMPANY
LYNDONVILLE, VT.

Send For This FREE BOOK

Reading Bone Fertilizer

Quality Service Satisfaction

Feeding the World: The American farmer's job. To do your utmost the land should be fed too. Stick to the old dependable when it comes to feeding the land—Reading Bone Fertilizer.

(This trade mark means quality)

Reading Bone Fertilizer Co., Reading, Pa.

Ask your dealer for Reading Bone Fertilizer.

Write for booklet and further information.

Mention The Review When to Advertisers

THE DAIRY LABORATORIES
5 North 20th Street, Philadelphia, Pa.

Consulting and Analytical Chemists

Complete Chemical and Bacteriological Analysis of Milk, Dairy Products, Foods and Waters

FLY SPRAY TO KEEP FLIES OFF DAIRY CATTLE

Chlorine Solution to Sterilize Milk Utensils

Write for information
Dr. Lee H. P. Maynard, Milk Expert
Dr. H. S. Johnson, Bacteriologist
Branches at Washington, D.C. Pittsburgh, Pa. Baltimore, Md. St. Louis, Mo.

**Mention The Review
When Writing to Advertisers**

DON'T THROW YOUR OLD CANS AWAY



American Retinning Co.
819-823 N. Lawrence Street
PHILADELPHIA, PA.

Hoffman's Clover Seed Oats—Corn Alfalfa—etc.

Where quality counts, Hoffman's Seeds are present. You should learn this for yourself this spring. Many other farmers have done so. Write us today—mention this ad—ask for our

New 1921 Catalog—Free

We'll send you free samples. You buy the seeds you want—if you're not pleased—return them—we'll refund your money. If you need Clover Seed of any kind—Alfalfa—Corn, Oats or other Grain—Field Peas, Beans—Potatoes, it will pay you to see our offers.

Prices are Lower

This will permit heavier seedling—changing varieties at lower cost—and renewing of certain kinds you already have. Write today, and you will be well pleased and well paid with Hoffman's Farm Seeds.

A. H. Hoffman, Inc., Landisville, Lancaster Co., Pa.

Reading Bone Fertilizer

Quality Service Satisfaction

Feeding the World: The American farmer's job. To do your utmost the land should be fed too. Stick to the old dependable when it comes to feeding the land—Reading Bone Fertilizer.

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Reading Bone Fertilizer Co., Reading, Pa.

Ask your dealer for Reading Bone Fertilizer.

Write for booklet and further information.

Mention The Review When to Advertisers

THE DAIRY FARMER'S FUTURE

(Continued from page 9)

eration if we are to tide over this difficult period without discouraging dairy-men so that we will in a few years have a greatly curtailed production and a violent reaction. Hence we find in some territories an effort to control the manufacture of a part or all of the surplus production over that required for the liquid milk market through farmer owned co-operative plants, and even in some markets a beginning is being made in co-operative distribution. Just how far this co-operation shall go or what form it shall take is a matter still open to question, but certainly as individual dairy-men, interested in putting our business upon a more secure basis, we must no doubt have more co-operation than is required for simple collective bargaining.

The future for the dairy industry is full of promise if our problems are approached properly and if we do not lose our heads in adopting wild schemes for the solution of these problems. The dairy cow already produces one-fifth of our total food supply, a food which is recognized as being absolutely essential to health and the well being of the people of our country. The dairy cow is also the most efficient converter of rough feed into human food and as our population increases, we will, as a people, therefore, become even more dependent upon the cow for our sources of animal food. If the men engaged in the production of this important food are to be contented citizens, they must be assured of a more decent living and that means a fairer profit. More efficient production alone will not do it, as has been shown. We must link up with it more efficient marketing in which we have only made a beginning. In order to secure more efficient marketing we must have more organized team work or co-operation. Let us keep our feet on the ground and tackle the job. How and where can we, as individual producers, co-operate to make our present marketing methods more efficient so as to assure the future of the dairy business? That is the question demanding an answer. The consumer who thinks at all about his future food supply is just as much concerned about the welfare of the dairy industry as is the producer.

FIGHT AGAINST FRUIT PESTS

GOOD FALL AND WINTER JOB

In order to increase the production of fruit it is essential that fruit growers wage a continuous fight on orchard pests. Some of the most valuable control work can be accomplished during the fall and winter months. Certain destructive insects are held in check only by spraying during the dormant period of trees, when stronger washes may be used than when the trees are in foliage. Many insects spend the winter on the tree in the egg, larva or pupal stage, and their destruction in the course of pruning and other orchard work is practicable and is of much importance in keeping them reduced. Certain fungous and bacterial diseases, particularly pear blight and apple canker, are best worked upon at this time.

Practically all of the orchard scale insects can be successfully controlled by spraying the trees after the foliage has dropped. This work may be done either in the fall or during the winter when the temperature is above freezing and in the spring before the buds come out. During these periods a strong solution of lime sulphur is used by a great many orchard-

ists in controlling San José scale and many other serious scale pests.

Other scale insect pests, such as the cherry scale, oyster-shell scale, etc., can usually be held in check by the dormant spray with lime sulphur wash. The treatment is also effective against the pear leaf blister mite, which is universally present on pears, and in many localities becomes a serious apple pest. Some plant lice that are destructive especially to young apple trees winter in the egg stage and are destroyed by this treatment. One thing that must be remembered in applying the dormant spray is that the solution should cover every part of the tree or it will not be effective.

T. B. SPREADS TO HEALTHY LIVE STOCK IN MANY WAYS

Here are a few ways in which tuberculosis may be introduced into a healthy herd:

By the addition of an animal that is affected with the disease; therefore animals should be purchased only from herds known to be free from tuberculosis, or from herds under supervision for the eradication of the disease.

By feeding calves with milk or other dairy products from tuberculosis cows; this frequently occurs where the owner purchases mixed skim milk from the creamery and feeds it to his calves without first making it safe by boiling or pasteurization.

By showing cattle at fairs and exhibitions reports have indicated that numerous herds have become infected through mingling with infected cattle at shows or occupying infected premises.

The shipment of animals in cars which have recently carried diseased cattle and which have not been disinfected properly.

Community pastures; pastures in which tuberculosis cattle are allowed to graze are a source of danger.

In most cases the outward appearance of the animal bears no relation to the degree of infection. The disease frequently develops so slowly that in some cases it may be months or even longer, before any symptoms are shown, therefore, be on the safe side and have your herd tested.

Much valuable information on the subject is contained in Farmers' Bulletin 1069, Tuberculosis in Live Stock, which may be had by addressing a request to the United States Department of Agriculture, Washington, D. C.

LIME-SULPHUR WASH INJURED BY FREEZING

One can never tell just what the effect of freezing will have upon concentrated lime sulphur wash. Sometimes it is not injured in the least by freezing, and at other times it is absolutely spoiled. Samples from the same barrel have been taken, in different bottles. These have been placed side by side in a freezing chamber and after having been subjected to freezing for the same length of time and returned to temperatures above freezing, one sample was found to be of absolutely no use, while the other sample was in its original condition.

Injury to lime sulphur by freezing is easily detected because injured lime sulphur will always have lost more or less of its rich dark red color, and by the presence of the fine sulphur particles in the bottom of the container.

It is always best to store lime sulphur where it will not freeze.

The latest farm slogan seems to be: "United we'll stick; divided we're stuck."

HEALTHY PURE BRED FOUNDATION STOCK

CHESTER COUNTY, PA.

HERDS UNDER FEDERAL SUPERVISION

Guernseys
May-Rose Breeding
HERD SIRES
LANGWATER HERO
No. 39634

Son of Langwater Heroine, A. R. record, 16221.1 lbs. milk, 805.64 lbs. fat in Class D.

LANGWATER ROYAL
25th, No. 63968

Son of Langwater Royal, the sire of three class leaders.

Use a Guernsey bull on your grade herd to raise the quality of your Milk.

M. M. Hollingsworth & Son
Landenberg, Pa.

ACCREDITED HERD

Holsteins
BULLS
from
A. R. O. Dams
with
Yearly Records

HERD SIRES
KING PIETERTJE
ORMSBY PIEBE 17th
PRINCE SEGIS FAYNE
PIETERTJE 6th

Towns End Farms
West Chester, Pa.

ACCREDITED HERD

Jerseys
BULLS
A Few Choice
Heifers

from
A. R. O. Cows
sired by
Financial Satin Noble

\$100 and Up
80 to Pick From

HIGHLAND FARMS
West Chester, Pa.

ACCREDITED HERD

Ayreshires

CONSTITUTION QUANTITY
CONFORMATION QUALITY

Stock of All Ages
Male and Female for
Sale

Prices and Pedigrees
on Application

Dr. E. C. DEUBLER
Berwyn, Pa.

ACCREDITED HERD

For Barrenness in Cows, Mares and Sows

Use Hood Farm Breeding Powder

Astonishing Success in making Barren Animals Breed—Indispensable After Abortion—Invaluable Where Cows do not clean—Profitable to use on Every Cow after Calving.

Read what others say:
Hood Farm Breeding Powder is great and has been a God-send to me. I cannot be without it.

SULZER BROTHERS,
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I have been using your breeding Powder for eight years, when needed, and am well pleased with it.

HENRY C. STRIEKER,
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Prices of Hood Farm Breeding Powder prepaid, \$1.15, \$2.75 and \$5.00.

Price of Hood Farm Flexible Injection Tube by mail, 90c, or with a \$5.00 order 75c. Please mention this paper.

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Ice Cream

Dry a piece of ice in the sun; wipe thoroughly with a damp cloth; stir in some cold cream or camphorated vaseline; flavor with anise, or kerosene oil; fan until it freezes, and garnish with spinach. This should be served with hot soup.

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A steadily increasing demand for over a quarter of a century proves their popularity. There's an international preparation for every farm animal.

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DUCKS OF QUALITY
GOOD EGGS FOR SALE NOW
D. M. STOUT, HERSHEY, PENNA.

Stomach Cake

Line a small boy's stomach with green apples, cucumbers, ice water and peaches of emerald hue. This is an economical recipe and can be done on short notice.

FOR SALE REGISTERED HOLSTEIN BULL CALVES

From Dams with Large Cow Testing Records and from a Sire whose two nearest Dams, as Heifers, averaged 23264 lbs. Milk and 1003 lbs. Butter in 365 Days

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Cold weather with long nights is "just around the corner"—NOW is THE time to have your car's battery given a good outside charge and a thorough inspection for the strain that Fall and Winter will place upon it. HERE is the station to do the work—the station that places SERVICE FIRST and sales last. Recharging, repairing, rebuilding.

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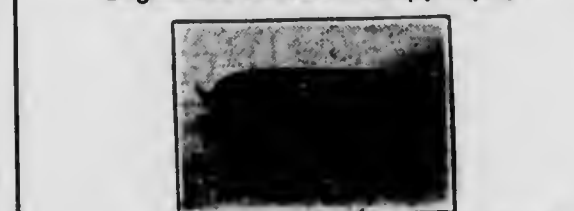
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C. H. DANA CO., 87 Main Street, West Lebanon, N. H.

**MENTION THE REVIEW
WHEN WRITING TO ADVERTISERS**



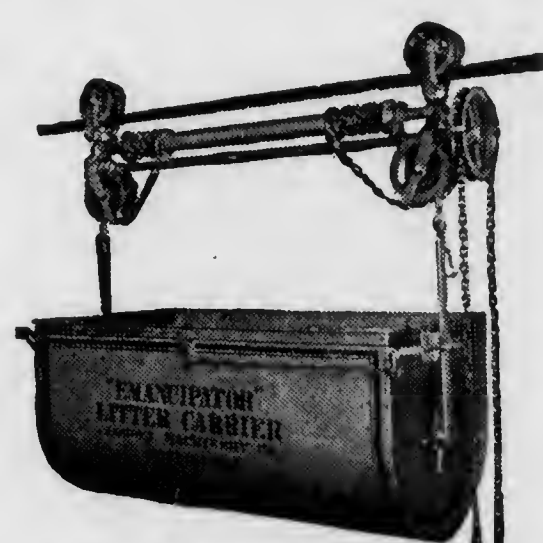
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Louden Detachable Water Bowls increase the milk production of a herd. They provide clean, fresh water within the reach of every cow.

We carry the famous Louden Line of Barn Equipment and Construction Goods in Philadelphia stock for immediate shipment at all times.

Our barn expert has co-operated in the construction and equipment of many of the most efficient farm, dairy, and private estate barns of the country and in the remodeling of others. We will be pleased to confer with you upon your barn problems. There is no charge for our advice and suggestions. Neither do you obligate yourself in any way by requesting it.



The Louden Emancipator Litter Carrier saves time and labor. It pays for itself quickly and earns continuous profit upon the investment.

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Are lower on many lines of Farm and Dairy Supplies. We welcome this for our prosperity depends upon that of farmers and dairymen, and in addition worth while profits do not result from slow sales at high prices, but from quick sales at right prices.

Just let us know what items you are interested in by checking list below and mailing to us, and we will do our utmost to save you money. We will also afford you price protection whenever it is possible to do so.

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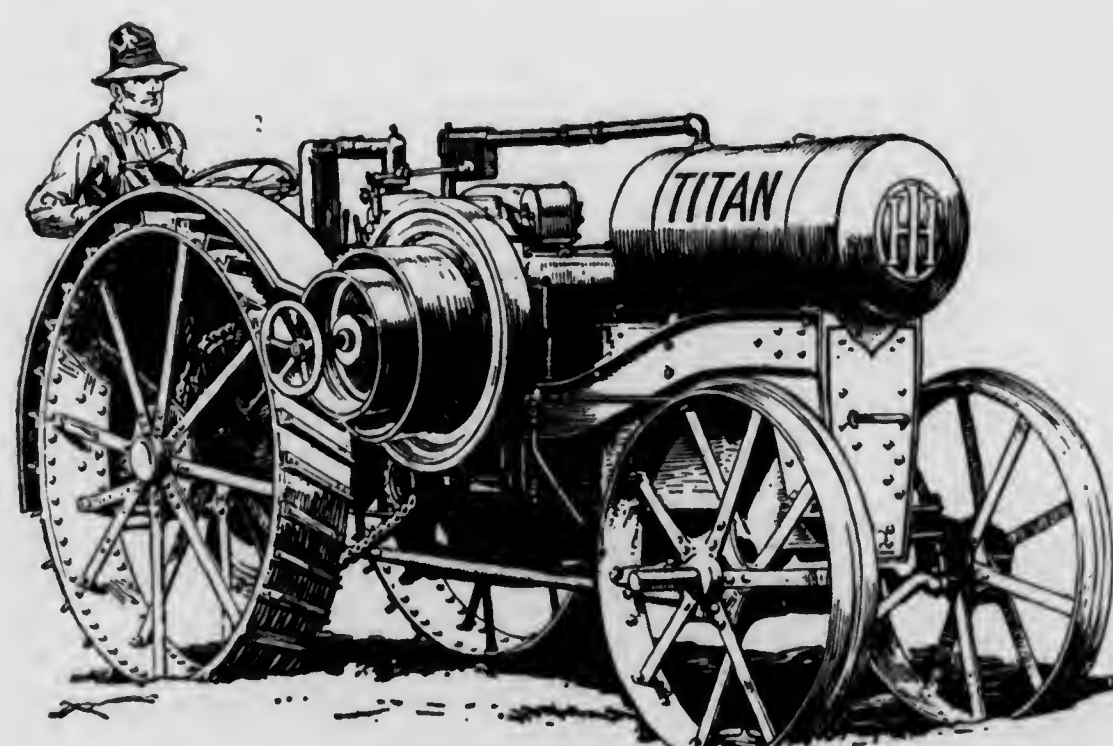
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**PHILADELPHIA FARMERS
and
DAIRYMENS SUPPLY COMPANY**
Everything for the Modern Farm and Dairy

1916-18 Market St., Philadelphia

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Gives more power for the money. Operates on kerosene and is ready for hard work at all times on either draw-bar or pulley. For smaller power units, the INTERNATIONAL kerosene engines, 1 1/2 to 10 H. P. give excellent satisfaction.

Bear in mind, please, that you can always reach us by 'phone at our expense. That is a part of our sales service. Just call Locust 1018 on Bell System, or Race 1568 on Keystone 'phone, for Philadelphia store; or Wilmington 6405-W on Bell 'phone for Wilmington Store. Please ask operator to reverse charges, the call will then be charged to our account.

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Milk Producers Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE INTER-STATE MILK PRODUCERS ASSOCIATION, Inc.

VOLUME I

WEST CHESTER, PA., AND PHILADELPHIA, PA., FEBRUARY, 1921

NUMBER 10

JANUARY MILK CONDITIONS FIFTH ANNUAL PENNSYLVANIA STATE FARM PRODUCTS SHOW

MARKET CONTINUES COMPLICATED

The market, on the whole, has been unsatisfactory. It was expected that some decline in the consumption of fluid milk would follow after the turn of the year, as it usually does, but during the past month it did not swing back again,

mile zone. This however, has only been maintained by co-operation among all concerned. Frequently whole milk has been offered in car load lots delivered in Philadelphia, from points outside the district at prices materially under the

By far the best and largest State Farm Products Show ever held under the auspices of the Pennsylvania State Department of Agriculture with the co-operation of the various organized bodies

annual meetings during the period of the show, held their meetings in various halls at different points in the city.

The work of the committee in charge of the show, the public and attendance left little, if anything to be desired. The



Booth and Exhibit, Interstate Milk Producers Association, Pennsylvania Farm Products Show, Harrisburg, Penna

as it customarily does. There has been a lack of buying on the part of fluid milk consumers, much of which can be traced to the decreased earning power of labor in many of the different industries.

The price of fluid milk, for human consumption, has been maintained at 8 cents a quart, delivered in Philadelphia, for 4 per cent. butterfat content, equal to \$3.08 per hundred pounds in the 50

basis named. Numerous offerings of cream, at prices below customary rates to the trade, have been made, resulting in an unfavorable influence on the trade.

In quite a few instances, more particularly in direct shipped milk, that is, milk going to the smaller dealers, the flow of milk has been heavier than could be taken care of and these dealers, not being in a position to manufacture the

identified with agriculture and allied lines, was held in Harrisburg, Pa., January 25, 26, 27 and 28th.

The exhibits were held in the Emerson-Brantingham Building, where two floors were given over to displays and in the Overland-Harrisburg Building, where two floors were also given over to exhibits.

The various agricultural organizations of the state, many of which hold their

attendance at the show probably aggregated 50,000.

In arranging the displays, the grouping of industries, more or less identified with each other, made it more satisfactory to the exhibitor and much more desirable for the visitor attending the show.

On the first floor of the Emerson-Brantingham Building were displayed exhibits largely identified with the dairy-

(Continued on page 13)

(Continued on page 9)

PENNSYLVANIA STATE COLLEGE ITS WORK AND RELATION TO DAIRYING

Of what benefit has the Pennsylvania State College been in the past to the dairy industry of the state? Or better, what has been its beneficial relation to the country as a whole with respect to the dairy industry?

To one fully acquainted with this great branch of work at Penn State, it would seem that there are a thousand and one little things, each with a meaning of Service, that would serve in part to answer that question. But to get down to pointed facts, there are to be found three prime motives of the work being done by the Dairy Department or its allied branches in the State College school of Agriculture, that tell in a few sentences how all mankind reaps the benefits of fruitful efforts.

The training of young men and women to become specialists in dairy production and manufacture, that they might broaden and build up the industry is the first objective of the College Dairy Department.

Intensive research problems of special interest to dairy feeding and breeding occupy the entire time of one or two specialists, while faculty members as a whole devote all the spare time possible to assist in making Pennsylvania rank among the leaders in dairy production.

A competent staff of dairy extension men works tirelessly throughout the state urging the formation of cow testing associations, bull associations, better herd and creamery management, and a score of other problems that are presented daily in the need for making the production of dairy products more efficient.

Prior to the middle of the last century, "higher education" consisted almost entirely of the so-called "classical" courses as offered by the long-established collegiate institutions of private and more or less religious character. During the period from 1850 to 1860 this nation was becoming aware of its vast resources in land, mine and forest, of undeveloped and unexploited wealth of raw materials for manufacture and of opportunities for trade and commerce. The schools and colleges of that day could not meet the demand for trained men who could make these developments. The nation urgently needed a college system which would include and emphasize courses for training leaders and workers competent to attack its economic problems and opportunities, and which would open the way for higher education for all classes.

This was the inspiration and spirit of the congressional Morrill Act of 1862 which established the American Land Grant College system. The Pennsylvania State College is the Pennsylvania unit of this system. Every state in the union accepted the Morrill Act and received a certain amount of public lands for the endowment of its college.

The chief obligation that each state held itself responsible for in accepting this Act was that within five years it should establish at least one college where—

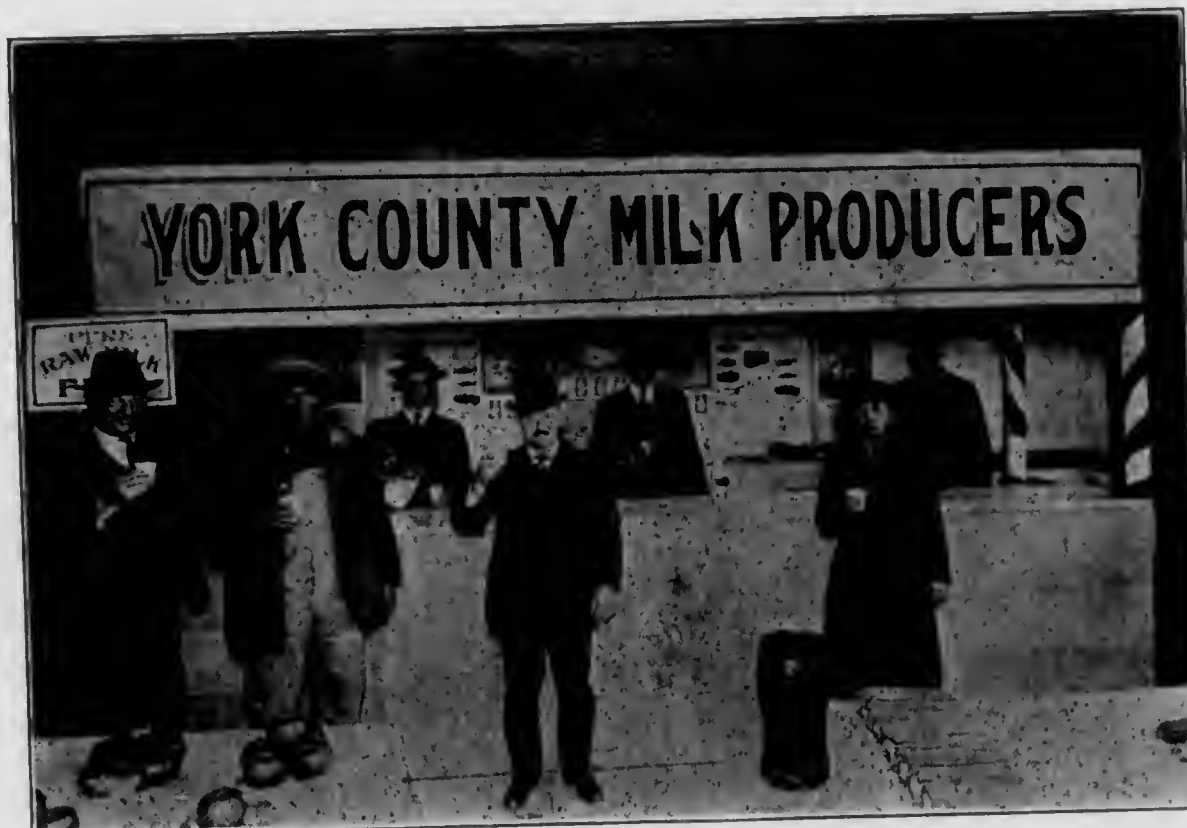
"The leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanical arts, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life."

The Pennsylvania State College was formally established on April 1, 1853,

when the Legislature of Pennsylvania accepted the Morrill Act "with all its provisions and conditions" and then, as if to emphasize its contractual obligation, added "the faith of the State is hereby pledged to carry the same into effect."

The lack of building space and extended class room and laboratory facilities is largely responsible for the turning away of hundreds of applicants for admission each September. This not only affects those who wish to study Dairy Husbandry or other agricultural subjects, but those who would follow any one of the thirty-nine four-year courses offered by the college in its Agricultural, Engineering, Liberal Arts, Natural Science and Mining Schools.

The importance of the future relation of the college Dairy Department and its various activities, instruction, extension and research, to the dairy industry of the state will be of vital interest during the developments that are bound to be



Booth of the York, Pa., Local of the I. M. P. A.
at York County Corn and Fruit Show

made and are now taking form in Pennsylvania. There is every indication that Pennsylvania will become one of the greatest dairy states in the union according to specialists who have made a study of the situation, because of the following leading facts:

1. The topography of the state affords plenty of good pasture land for dairy cattle.

2. Farmers of the state have demonstrated their ability to grow feed in sufficient quantities for even greater dairy production.

3. Practically every district in the state suitable for dairying is near centers of consumption of dairy products.

4. There is good transportation for all such districts.

5. Important improvement work is being conducted with beneficial results to all dairymen.

This last point brings us to one particular phase of service that is rendered by the Pennsylvania State College, the research investigations being made by her scientists—a ceaseless round of experimentation that is gradually building up the individual blocks of a bigger and better Pennsylvania dairy industry.

The most important piece of research work that has ever been done at the college in the matter of dairy improvement is the evolution of the balanced ration through the use of the respiration

YORK COUNTY CORN AND FRUIT SHOW

By GEORGE G. WEBER

Meetings

The second annual Corn and Fruit Show of York county was held at York, Pa., January 12-15 inclusive. Out of a corn show last year, which included about 110 exhibits, there grew this Corn and Fruit Show which included over 550 entries. A large number of other interesting features were included. Considerable space was taken up by commercial exhibits of farm machinery, tractors, trucks, feeds, fertilizers, and dairy products. Two prominent farmers' organizations of the county exhibited competitive displays of various farm products.

The exhibits of fruit generally were of a superior quality. A number of exhibitors, however, were showing for the first time and naturally did not select with same uniformity of size and color as those of broader experience. A marked contrast was noticed between the corn exhibits this year and those of last year in that there were a much smaller proportion of mixed and irregular samples displayed, thus giving the corn exhibits

Three annual meetings were held during the week of the show. On Wednesday, January 12th, the annual meeting of the Fruit Growers Association was held at the Court House. Dr. E. L. Nixon, Plant Pathologist and R. D. Anthony, of the Horticultural Department were the speakers for the day. The annual election of officers was held in the afternoon. The following were elected:

President, C. P. Kibbler, York; 1st vice-president, T. S. Snyder, Brodheads; 2nd vice-president, E. F. Kauffman, York; R. D. No. 7; secretary, Geo. G. Weber, York; treasurer, H. W. Anderson, Stewartstown.

Board of Directors—L. E. Hartman, Cly.; Samuel Swartz, Spring Grove; Noah Resh, Hanover; H. M. Anderson, New Park; Jacob Bear, York; R. D. No. 10; Geo. E. Stein, Wrightsville; R. D. No. 1; C. M. Wernig, York; J. C. Schmidt, York, and E. B. Hawkins, Delta.

The annual meeting of the York County Farm Bureau was held on Thursday afternoon, at which time the following officers for 1921 were elected:

President, Vallie Hawkins, Bridgeton; vice-president, T. Ross Wiley, New Park; secretary, Guy Leader, York; R. D. No. 2; treasurer, C. L. Hauser, York.

Following the annual report of the County Agent, representatives of various communities were called upon to give brief discussions of the needs of their respective communities for Farm Bureau work. F. P. Weaver, County Agent Leader of Pennsylvania, gave a talk on the community plan of organization as a means of doing efficient and effective work in co-operation with the County Agent.

On Friday, January 14th, was dairymen's day. The annual meeting of the York County branch of the Inter-State Milk Producers Association was held in the afternoon. The county agent outlined briefly the possibilities of dairy improvement work within the county. Secretary Balderston, of Philadelphia, gave a very interesting talk on "European Influence on Future Dairy Conditions." This was followed by the election of officers for 1921. President, J. A. Poorbaugh, York; R. D. No. 3; vice-president, I. J. Rishel, York; No. 8; secretary, C. D. Enig, Hellam; R. D. No. 1; treasurer, C. Allen May, Dover.

Business Men Lunch Together

Probably the most outstanding feature of the events of the week was the get-together meeting of city business men and country business men. This meeting was held at noon Thursday, at the Colonial Hotel, and was attended by approximately 135 farmers and 100 city men. Plans for this meeting were worked out by the Chamber of Commerce co-operating with the Farm Bureau. This was the beginning of a series of events which will be carried on throughout the year in an effort to establish a closer relationship between the city of York and York county.

Several speakers were present and gave very interesting talks. Appropriate music was rendered and everybody seemed to enjoy the event very highly.

Farmers and city men were seated alternately so as to give every possible opportunity for them to become better acquainted.

MILK SUBSTITUTES

It is probable that a number of our readers do not know that there are on the market and being sold extensively, in some sections, what are termed imitations, substitutes or compounds and that they are being more and more extensively used for purposes for which whole milk was formerly used.

A number of states have legislated against the sale of anything except pure, unadulterated cows milk, or what is generally known as "milk." Even the sale of skimmed milk is very closely restricted by the law in some states.

The majority of the so-called compounds or milk substitutes are made with skimmed milk as a base. The butterfat is removed from the milk, the resulting skimmed milk is evaporated, probably to one-half its bulk and to this is added some vegetable fat, such as coconut oil, giving a product, in one instance of 7.8 per cent. vegetable fat and 25.5% total solids. The United States standard for evaporated milk calls for 7.8% of milk fat and 25.5% of total milk solids. Evaporated skimmed milk, by the same standard contains, all tolerances being allowed for, 25% of milk solids, and no milk fats.

Several states have laws against the sale of milk compounds or substitutes. Ohio goes still further, legislating against the sale of evaporated skimmed milk. While other states have bills in their respective legislatures or are preparing to introduce such bills.

The Pennsylvania State Dairy Council has been investigating the sale of these so-called skimmed milk products and has compiled some interesting data on the subject. That they are being sold and used for substitutes for standard milk products, is without question. Their use is growing and their consumption removes just that much of a market for the dairy farmers' own product and as far as is known, their manufacture is entirely without the state and therefore restricts the market of the home producer.

The principal factor, however, is not that they are being sold, even though as substitutes, and contain some healthful elements as a food, but that they do not contain what the unsuspecting anticipate when bought, the necessary growth promoting elements, which authorities state, are not found in vegetable fats, but in butter or milk fats, eggs and some of the leafy vegetables.

These products, put up in cans similar to those used in the packing of standard brands of condensed or evaporated milk products, are sold to the unsuspecting, the foreign element and those not able to read, and as a result the growth promoting elements, particularly in the cases of babies and infants is lacking and proper growth producing nourishment is lacking.

They are usually sold under fanciful names, which has become the practice with a number of other substitutes entering into the general diet.

One of these products, "Hebe," is manufactured by the Hebe Company, with plants at Mount Vernon, Wash.; Sedro Woolley, Wash.; Ferndale, Wash.; Jefferson, Wis.; Oconomowoc, Wis. "Caroline," imitation evaporated milk, composed of fresh cows milk, butterfat removed, and highly refined coconut oil substituted, is manufactured by the Carolene Co., Chicago, Ill.

As with oleomargarine or butter substitutes with other fancy names, the use of these substitute products not only reduced in food value but not containing the necessary growth producing elements,

simply on the ground of cheapness, takes from the dairymen the natural consumption of just so much true butter and true milk and reduces in proportion the consumption of his own product—milk.

The amount in tonnage figures is stupendous and were the same amount of milk used in making true milk products, which these milk and butter substitutes supplant, there would probably be little question of a surplus milk supply today.

ASSOCIATION ACTIVITIES

January was a busy month in Inter-State Milk Producers Association affairs. Your officers and field men have been almost constantly in the field on one activity or another.

This has been the season of state and local farm product shows, annual meetings of local branches and similar meetings, many of which have been attended by your officers.

State Farm Product Shows were held at Trenton, N. J. and Harrisburg, Pa. Extensive shows were held at York and Reading, Pa. In connection with these shows were many meetings, both annual and general, of organizations identified with the agricultural and dairying industries. These are referred to at length in other columns. Many of them were attended by officers and field men in the interest of the Inter-State Milk Producers Association.

In addition to these general meetings, your organization was represented at 15 meetings of local organizations in the territory. While most of these were the customary meetings of the locals, at a number of them matters of importance were discussed and some differences adjusted.

During January 181 new members of the association were signed up and plans were completed looking toward a greater increase in membership.

With the milk supply still very plentiful and dealers, particularly the smaller ones, taking direct shipped milk, there was a constant disposition to drop off dairies here and there to decrease the supply. In January the requests of our members for transfer to new buyers, was greater than could be handled by your sales manager.

At this time there is a waiting list from dairymen who would like new buyers. These cases are being attended to as fast as possible, but it is evident that unless the dairy be extra high grade the prospect of changes is remote, when the supply, particularly of direct shipped milk is greater than the demand.

Your officers have given considerable attention to the furtherment of the Inter-State Dairy Council, of Philadelphia, which represents the advertising and publicity branch of the association. This project is now well launched and its benefits toward an increased consumption of milk and milk products should begin to show results in the near future. Your president, Frank P. Willits and A. A. Miller, editor of the Milk Producers Review, have been appointed on the general committee in connection with this work.

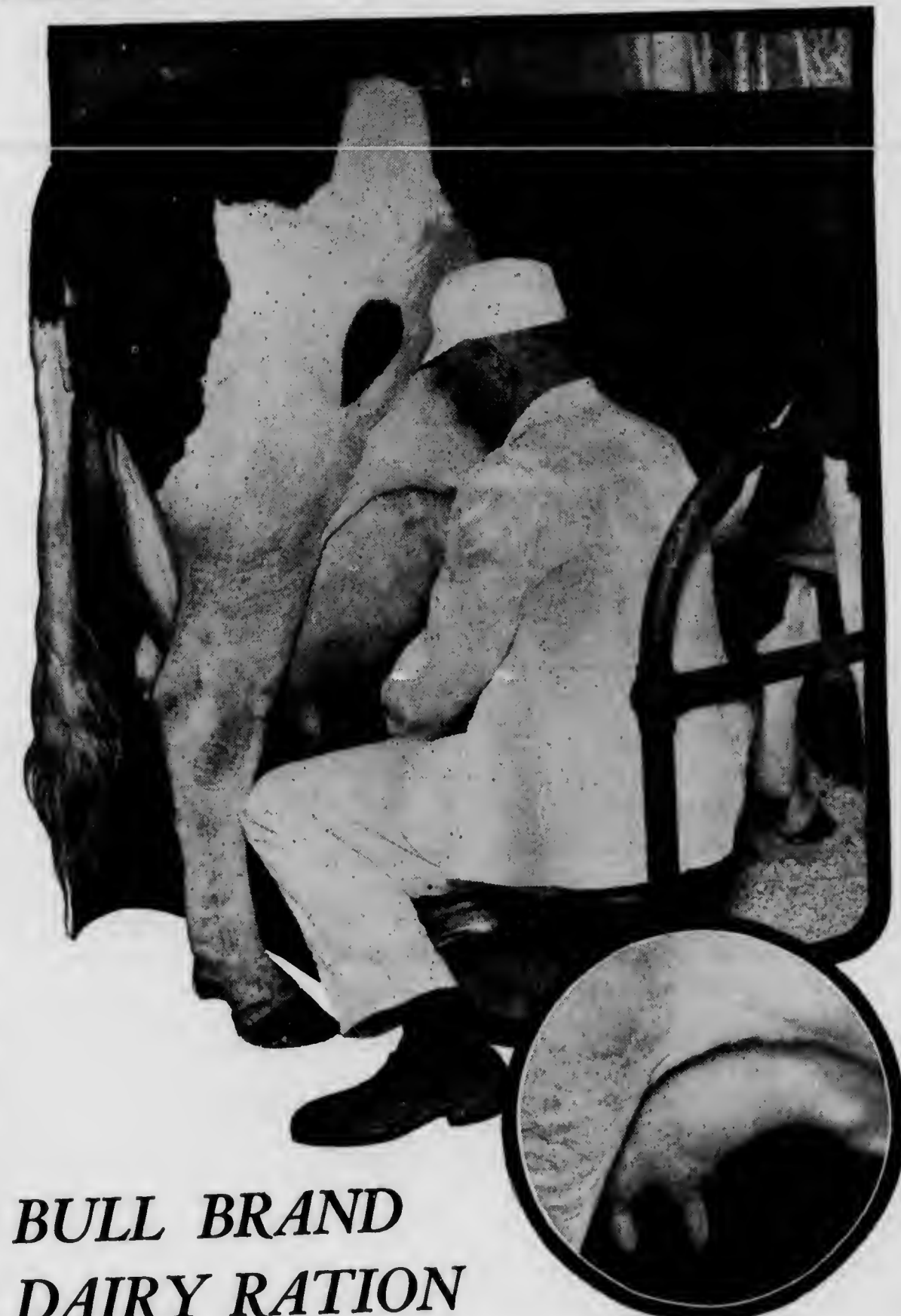
Your executive committee has had one meeting during the month, approving various actions of your officers and directing their actions in other cases.

A meeting of the board of directors will be held on February 9th.

In accordance with a resolution, passed at the annual meeting, the board of directors was increased to twenty-one.

BULL BRAND DAIRY-RATION

Made on a base of Dried Brewers Grain



BULL BRAND DAIRY RATION brought the milk back

WHEN H. J. George, owner of Maple Dale Dairy Farm, Williamstown, Mass., switched from Bull Brand Dairy Ration to another feed, the milk production of his entire herd fell off. Bull Brand Dairy Ration brought it back.

Increase the milk production of your herd. Feed Bull Brand Dairy Ration. It is a scientific mixture of milk producing feedstuffs built on a base of Dried Brewers' Grain, renowned for its favorable action on the secretion of milk. It will absorb large quantities of water, making it like spring grass, a moist, succulent feed that turns to milk.

Bull Brand Dairy Ration may cost you two cents more daily for each cow than some feeds, but if, as any number of other feeders are doing, you average daily two quarts of milk more per cow, your additional net profit is thirteen cents more for each cow.

If your dealer cannot supply you with BULL BRAND DAIRY RATION write us. Our Guarantee protects you.

ASK YOUR DEALER FOR OTHER
BULL BRAND FEEDS
FOR LIVESTOCK AND POULTRY

Maritime Milling Co., Inc.

Buffalo, N. Y.

Without BULL BRAND DAIRY RATION the milk bag shrank—BULL BRAND brought it back.

Analysis and Ingredients of Bull Brand Dairy Ration

Analysis:

Protein not under 24%;
Fat 6%; Fibre not over 12%.

Ingredients:

Dried Brewers' grain, dried malt grains, old process oil meal, cotton seed meal, corn gluten feed, hominy feed, coconut meal, wheat middlings, ground oats, and salt (3/4 of 1%).

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Editorial

It is very evident that the farmer is not doing all he should for the best interests of co-operative movement.

The success of any effort along co-operative lines depends largely on the individual efforts of those co-operating.

Apparently, a large number of farmers still work along the lines of and with the idea of letting the other fellow do it. This is a mistake. Any co-operative movement is just so strong as its weakest member. No matter how hard a few work for a common purpose, their success depends upon the support and co-operation of every one of the co-operatives.

The Inter-State Milk Producers Association as well as any other co-operative organization, needs actual co-operation of all its members. If results to the best interest of the dairymen are to be obtained, everyone must do their part.

Sharp examples of let the other fellow do it, have recently come to light in our own association work. In one instance a large local did not have more than 10 per cent. of its membership attended a meeting, called for consideration of important matters. In another case, owing to the weather being rainy, there was not enough members present to hold a meeting, although the Inter-State field man had traveled some 30 miles in the rain to be at the meeting.

Such conditions should not exist. There should be real attendances at all the meetings called by your local officers. There always is something of importance to consider or the meeting would not have been called.

We admit that at some seasons the farmer is busy, particularly in harvest time, and when a meeting is called at that season, it goes without saying that something of vital importance is on, or the meeting would not have been called.

Therefore, make it a point to attend all meetings of your local—they are important and need your co-operation to attain the best results.

EMERGENCY TARIFF BILL

The emergency tariff bill generally known as the "Fordney Bill," was passed by the National House of Representatives in a form unsatisfactory to dairy farmers.

Since early in January the bill has been before the Senate Finance Committee, where its provisions have been discussed pro and con. Efforts have been made to include a duty to be assessed against foreign butter, cream and milk. The rates vary. In instances 6 cents a pound have been asked as a levy on butter—about the same on cheese, 5 cents per quart on cream and 2 cents on milk. A proposed duty covering what is equivalent to about 5 cents a pound on vegetable fats entering into oleomargarine, has also been read into the bill.

While this legislation may aid the situation in the dairy industry to some extent and may or may not be available in the near future, owing to the possibility of presidential veto, it is a makeshift proposition and should only be considered as a temporary means.

It should, however, provide some data which will be available when a general tariff bill is considered at the next session of Congress, and should only be considered in the light that it is believed to be intended—as a temporary measure.

At the same time the farmers of this country should not fail to urge their respective senators to use every effort to have the dairy interests protected, and to include in the bill such duties as will protect the industry from foreign competition.

NOW IT'S THE MILK SUBSTITUTE

We have known the butter substitute of old, and even with preaching and preaching and no matter how badly it effects his own dairy interests, some farmers will use it—simply because it is cheaper.

Now comes the milk substitute. Its been creeping into the market for some time. We are now feeling its effect. "Stop, look and listen," if you want to know what is going on in milk substitutes.

It's a wise man that knows what he is getting—sometimes he knows and does not care, but what about the children; about those who cannot read? Substitutes for milk that do not contain the growth promoting qualities necessary to sustain life should be legislated out of existence. They weaken the coming race. Eminent authorities tell us that whole milk or the fat contained in whole milk contains the necessary elements to promote growth, particularly in infants and children.

Why should the sale of so-called milk products be permitted when there are so many ways of imposing it on the public? Condensed or evaporated milk is not always offered for consumption in the original package.

Why continue a practice which will enable the unscrupulous to impose on the unsuspecting public?

It's time to call a halt on milk imitations, compounds or substitutes.

Lend your aid that they be driven out of the market.

The Department of Agriculture and its co-operators, in the staging of the Fifth Annual Farm Products Show of the State of Pennsylvania, recently held in Harrisburg, deserve the highest praise for their efforts. The show could scarcely have been better nor could the general arrangements, with the facilities at hand, have been improved upon.

What the show needs is larger quarters, where all the exhibits can be under

one roof, with means adjacent for holding the many agricultural meetings, held at the time of the show.

Right here let us say one word in favor of a State Fair—the buildings of which should be planned to house just such undertakings as the State Farm Products Show, which has been so highly educational to the agricultural interests of the state.

BALTIMORE MILK SITUATION

The price of 4% milk F. O. B. Baltimore for the month of February will be 34 cents, the same as December and January.

This applies to the basic price only on the amount shipped by each producer during the months of September, October, November and December. All over this amount, a reduction of 10 cents per gallon will be made on a price of 24 cents. This is a reduction of 6 cents per gallon from the January price, and was caused by a large amount of surplus which some of the dealers were carrying.

There are two reasons for this surplus: Increased production and decreased consumption.

The increased production is caused by the abnormal weather conditions and the fact that owing to the decline in price of hay, corn, etc., many farmers are feeding this home grown feed to the cows thinking they can market it better in this way than by selling at the market prices.

The decrease in consumption is caused by the closing of many factories, throwing many thousands of people out of employment, which has caused them to curtail their buying; and milk is one of the many things affected.

If we have real winter weather during February and March, the production of milk will fall off and while the amount to each producer may be small, even two gallons a day multiplied by twenty-six hundred means over five thousand gallons per day more than the surplus that now exists. On the other hand, if business resumes normal conditions the milk sales will increase and instead of a surplus, there may be a demand for milk during the next month.

To create a demand we have arranged to open an educational campaign early value of milk will be taught in the schools in February where the gospel of the and by demonstrations, lectures, etc., and have the consuming public of Baltimore city know the value of milk as a food. We have adopted the slogan "More Milk—Better Health," and we hope to make this familiar not only to every school child in the city but to the adults as well.

D. G. Harry,

President Maryland State Dairyman's Association.

Berks Co., Pa., Farm Products Show

The Seventh Annual Farm Products Show for Berks county, Pa., held in Reading, Pa., January 13-15th inclusive, under the direction of the Berks County Farm Bureau, with the co-operation of the banks and trust companies of Reading, Pa., was the largest in point of exhibits and number in attendance that has been held. Corn, potatoes, apples, canned and dried products, aggregating 582 exhibits, representing 20 of the 24 communities and 160 different exhibits were shown. The exhibit was held in the ware rooms of the Worley Hardware Company. The attendance was larger than at any other show. Cash prizes to the amount of \$240 were awarded the prize winning exhibitors.

SKIMMED MILK

Buyers of milk in almost all of the primary markets have been hard put to find an outlet for skimmed milk and skimmed milk products. So much so that in many cases the skimmed milk value of the whole milk has become almost an entire loss to the producer.

The whole milk markets have about all the milk that can, under existing conditions, be absorbed. Manufacturers and creameries buying whole milk, who are separating, making either butter, cheese, or selling cream, find little market for the skim milk. It cannot be evaporated or condensed under existing conditions in the trade, except at prices to meet competition, which means virtually butterfat value alone for the milk. In fact, not a few buyers are forced to run their skimmed milk into the sewer—a total loss.

Condensed milk, at almost any price, continues a drug on the market. Large stocks are available. There is no export business, owing largely to unfavorable rates in money exchange.

There is little encouragement to the producer to plan to use skimmed milk extensively on the farm. There is little profit at present prices in pigs, and about the time a herd of swine has been acquired, conditions change and buyers want the whole milk. Chickens thrive on skimmed milk but the amount that can be used in this way is truly small.

Opinions differ as to the advisability of feeding calves on skimmed or whole milk. Whole milk for a time should undoubtedly be given young calves. If the calf is to go to the butcher it will thrive on whole milk. If it is to be raised, many believe that after a time it would do best on skimmed milk in conjunction with other feeds. Some recommend the immediate skimming, by hand separator, of the cows milk and the skimmed milk fed the calves, the hogs and the chickens while still warm. Some producers now figure skimmed milk as worth from 40 to 45 cents per hundred pounds, in value as a feed for hogs, while the same value is estimated for calves; although for chickens it has a relative higher value as a food.

Milk producers must need make every dollar count. Whole milk, at present prices, rarely shows a profit and in many cases a direct loss, owing to the shrinkage in the value of skimmed milk. Every dairyman, who is confronted by low price conditions, should make every effort to obtain the full value of the skimmed milk in his home feeding.

Harbourton, N. J., Local Organized

On Friday evening, January 21st, about sixty milk producers attended a meeting at Harbourton, N. J. Following addresses by Mr. Paul B. Bennet, of the New Jersey Department of Agriculture; Mr. Barnhart, County Agricultural Agent; Frederick Shangle, treasurer of the Inter-State Milk Producers Association; Wm. H. Hamilton, and several milk producers, those present were formally organized as the Harbourton Local of the Inter-State Milk Producers Association. Wm. H. Hamilton was chosen as president and Alfred Rogers was elected secretary-treasurer. The new local begins its work under a strong, aggressive management and should prove a valuable adjunct to the co-operative movement. The Review expresses its best wishes for the success of the new local.

More milk and cheese on the family bill of fare means less meat to buy and more money saved, as well as better health.

LATEST MARKET PRICES

January Milk Prices

The Basic and Surplus Plan of purchasing milk in the Philadelphia territory again became effective with January. Under this plan the average quantity of milk shipped during October, November and December, 1920, is taken as the "basic quantity" and is paid for at the basic price quantity will be paid for on the basis of 92 score solid packed creamery butter New York City, plus 20 per cent.

Producers changing from one buyer to another after January 1st, are considered as having forfeited their basic standard and when taken on by other buyers are rated at a 50 per cent. basic and 50 per cent. surplus basis.

Prices subject to change whenever warranted by market conditions

F. O. B. Philadelphia
From these prices one cent per 46 quarts (or one cent per 100 pounds) is to be deducted by the buyer, which together with one cent per 46 quarts, contributed by the buyer, is to be turned over to the treasurer of the Inter-State Dairy Council for the purpose of carrying on a publicity campaign, advertising the food value and greater consumption of dairy products. The usual commission from the members of the Inter-State Milk Producers Association is to be deducted and returned to the Association as heretofore.

Test	Basic Price	Basic Price	Price for all
Per cent.	100 lbs.	per quart	Quantity
3.1	\$3.28	7.1	5.9
3.1	3.32	7.2	6.0
3.2	3.36	7.3	6.1
3.3	3.40	7.4	6.2
3.4	3.44	7.5	6.3
3.5	3.48	7.6	6.4
3.6	3.52	7.7	6.5
3.7	3.56	7.8	6.6
3.8	3.60	7.9	6.7
3.9	3.64	8.0	6.8
4.0	3.68	8.1	6.9
4.1	3.72	8.2	7.0
4.2	3.76	8.3	7.1
4.3	3.80	8.4	7.2
4.4	3.84	8.5	7.3
4.5	3.88	8.6	7.4
4.6	3.92	8.7	7.5
4.7	3.96	8.8	7.6
4.8	4.00	8.9	7.7
4.9	4.04	9.0	7.8
5.0	4.08	9.1	7.9

When the milk is not tested the price f. o. b. Philadelphia is 8 cents per quart

RECEIVING STATION PRICES

Less Freight and Receiving Station Charges
From this date quotations will include a deduction of one cent per 100 pounds which amount, together with one cent per 100 pounds, contributed by the buyer, is to be turned over by each buyer to the treasurer of the Inter-State Dairy Council for the purpose of conducting a publicity campaign, advertising the food value and greater consumption of dairy products. The usual commission from the members of the Inter-State Milk Producers Association is to be deducted and returned to the Association as heretofore.

Less Freight and Receiving Station Charges

Miles	Basic Price	Basic Price	Price for all
100 lbs.	per quart	Quantity	surplus milk at all
1	\$2.77	3.1	2.17
11	2.73	3.2	2.21
21	2.72	3.3	2.24
31	2.72	3.4	2.29
41	2.70	3.5	2.33
51	2.68	3.6	2.37
61	2.67	3.7	2.41
71	2.66	3.8	2.45
81	2.64	3.9	2.49
91	2.63	4.0	2.53
101	2.62	4.1	2.57
111	2.61	4.2	2.61
121	2.60	4.3	2.65
131	2.58	4.4	2.69
141	2.57	4.5	2.73
151	2.56	4.6	2.77
161	2.55	4.7	2.81
171	2.54	4.8	2.85
181	2.53	4.9	2.89
191	2.52	5.0	2.93
201	2.51	5.1	2.97

Freight rates deducted on a basis of 46 quarts 112 per cent. of 40 quarts, plus 3 per cent. war tax. Four-tenths of a cent added or deducted for each tenth of one per cent. butterfat above or below 3 per cent.

FEBRUARY MILK PRICES

Subject to the same general conditions as apply to January prices and subject to change whenever warranted by market conditions.

Test	Basic Price	Basic Price	Price for all
Per cent.	100 lbs.	per quart	Quantity
3.1	\$3.28	7.1	5.9
3.1	3.32	7.2	6.0
3.2	3.36	7.3	6.1
3.3	3.40	7.4	6.2
3.4	3.44	7.5	6.3
3.5	3.48	7.6	6.4
3.6	3.52	7.7	6.5
3.7	3.56	7.8	6.6
3.8	3.60	7.9	6.7
3.9	3.64	8.0	6.8
4.0	3.68	8.1	6.9
4.1	3.72	8.2	7.0
4.2	3.76	8.3	7.1
4.3	3.80	8.4	7.2
4.4	3.84	8.5	7.3
4.5	3.88	8.6	7.4
4.6	3.92	8.7	7.5
4.7	3.96	8.8	7.6
4.8	4.00	8.9	7.7
4.9	4.04	9.0	7.8
5.0	4.08	9.1	7.9

When the milk is not tested the price f. o. b. Philadelphia is 8 cents per quart

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISEMENTS

RECEIVING STATION PRICES

Less Freight and Receiving Station Charges

Miles	Basic Price	Basic Price	Price for all
100 lbs.	per quart	Quantity	surplus milk at all
1 to 10 incl.	\$2.77	3.1	2.17
11 to 20 "	2.73	3.2	2.21
21 to 30 "	2.72	3.3	2.24
31 to 40 "	2.72	3.4	2.29
41 to 50 "	2.70	3.5	2.33
51 to 60 "	2.68	3.6	2.37
61 to 70 "	2.67	3.7	2.41
71 to 80 "	2.66	3.8	2.45
81 to 90 "	2.64	3.9	2.49
91 to 100 "	2.63	4.0	2.53
101 to 110 "	2.62	4.1	2.57
111 to 120 "	2.61	4.2	2.61
121 to 130 "	2.60	4.3	2.65
131 to 140 "	2.58	4.4	2.69
141 to 150 "	2.57	4.5	2.73
151 to 160 "	2.56	4.6	2.77
161 to 170 "	2.55	4.7	2.81
171 to 180 "	2.54	4.8	2.85
181 to 190 "	2.53	4.9	2.89
191 to 200 "	2.52	5.0	2.93
201 to 210 "	2.51	5.1	2.97

Prices for milk above basic quantity based on 120 per cent. of the average monthly or semi-monthly price of solid packed 92 score creamery butter, New York City, in May, June and July an increase of 10 per cent. and in August and in August an increase of 5 per cent. in the basic quantity of milk shipped is allowed.

SURPLUS BASIS PRICES

4 per cent. milk at all receiving points

1920	First half	Average
January	\$3.16	\$3.12
February	3.20	3.18
March	3.14	3.19
April	3.28	3.48
May	2.96	3.00
June	2.71	2.76
July	2.76	2.76
August	2.61	2.64
September	2.78	2.81
1921	2.61	2.53

These prices are based on 120 per cent. of the average monthly or semi-monthly price of solid packed 92 score creamery butter, New York City, in May, June and July an increase of 10 per cent. and in August an increase of 5 per cent. in the basic quantity of milk shipped is allowed.

JANUARY COMPARATIVE PRICES

PAID PRODUCERS FOR MARKET

MILK	
Eastern Territory	
4 per cent. butter fat, per 100 pounds	
Philadelphia, 50 mile zone	\$3
New York, 200 mile zone	2
Pittsburgh, outlying points	2
	Basic Surp
Baltimore, per gallon f. o. b.	\$0.34 \$0
Cleveland, O. Creamery Station	2.95

CURRENT RETAIL MILK PRICES

Pasteurized and bottled

Subject to Board of Health Regulations

Grade B or Market Milk

Philadelphia	18
New York	16
Baltimore	15
Pittsburgh	15

MONTHLY PRICES OF GRADE B O
CONDENSED MILK

MONTHLY PRICES OF GRADE B OR MARKET MILK

F. O. B. Philadelphia and at receiving stations in the 50 mile zone, at 3 per cent. butterfat. Four cents being added or deducted for each one-tenth per cent. fat above or below 3 per cent.

1920	F. O. B. per quart	Receiving station 50 mile zone per cwt.
January	\$1.1	\$1.21
February	1.1	1.21
March	1.1	1.21
April	1.1	1.21
May	1.1	1.21
June	1.1	1.21
July	1.1	1.21
August	1.1	1.21
September	1.1	1.21
October	1.1	1.21
November	1.1	1.21
December	1.1	1.21
1921	1.1	1.21

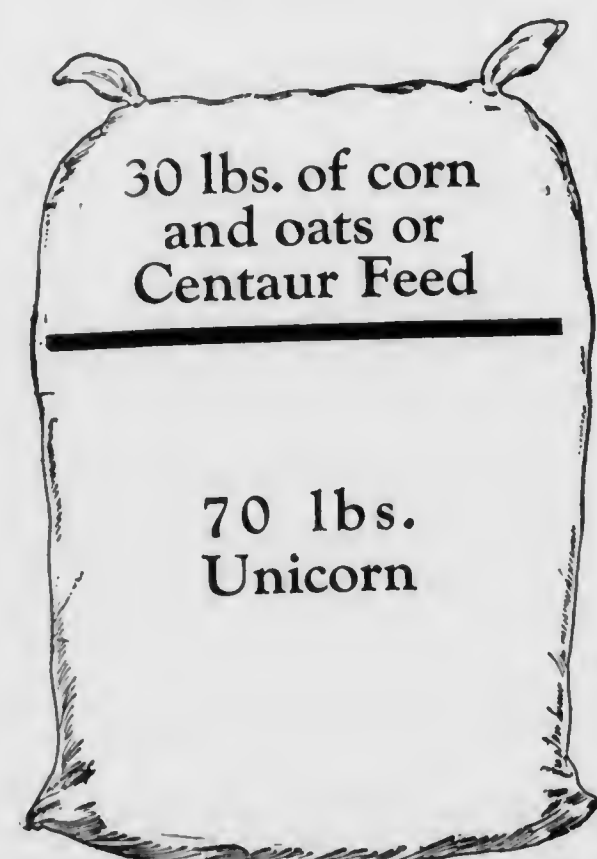
JANUARY BUTTER PRICES

92 score solid packed creamery butter, cents per pound

		cents per		
		New York	Phila.	Chi.
rice	3	57	57 1/2	54
ort	4	57	57 1/2	55
	5	57	57 1/2	55
	6	57	57 1/2	55
	7	57	57 1/2	55
	8	57 1/2	54	54
	10	54 1/2	54	44
	11	54	54 1/2	44
35	12	54	54 1/2	44
7	13	51	52	44
	14	52	52	44
	15	52	52	44
	17	52	52	44
	18	51 1/2	52	44
1	19	51 1/2	52	44
2	20	51	51 1/2	44
35	21	51	51 1/2	44
8	22	50	51 1/2	44
	24	49 1/2	50	44
5	25	50	50	44
6	26	50	50 1/2	44
7	27	50	50 1/2	44
	28	50 1/2	48 1/2	44
o. b.	29	49 1/2	48 1/2	44
	31	50	48 1/2	44

Feed Unicorn With Home-Grown Grains

Feed this way
with clover hay



Centaur is a general purpose feed. Fine for young stuff and dry cows and just right for widening Unicorn.

You cannot produce milk profitably on home-grown grains alone, no matter what their price.

They will go farther and yield a real profit when fed with Unicorn Dairy Ration.

A seventy-thirty mixture is about right for most cows. It produces \$4 worth of milk for each \$1 worth of feed.

Don't deceive yourself. You can't mix your own grains with high-protein oil meals and beat Unicorn in final cost or results.

Feed Unicorn with home-grown grains for profit.

CHAPIN & COMPANY

Chicago

New England Office at Boston

MAULE SEED BOOK
A Sure Guide to Better Gardens
It will show you how to produce large, healthy, vegetable crops—how to have beautiful flowers.

THE MAULE FREE SEED BOOK
This 176-page illustrated catalog tells what seeds to use; when and how to plant them. All the secrets of garden success. Send for it today.

WM. HENRY MAULE, Inc.
2113 Arch St., Philadelphia, Pa.

Maule's seeds
Once grown—Always grown

CHEESE MAKING IN SOUTH BIG FACTOR IN DAIRY INDUSTRY

In the South, particularly in North Carolina and Tennessee, the cheese industry is becoming a noteworthy factor

5 Great Novelties 20 cts.

AUTUMN GLORY. A new hardy plant. The most showy Autumn bloomer, surpassing all others. It is the latest to bloom, showing its full glory after frost has killed all tender flowers. Greatest novelty in twenty years. Succeeds everywhere, reaching perfection the first season from seed, and continues blooming for years. 20 cts. per pkt. With each order we send one trial packet each of **PINK WOOLFLOWERS**, new—nothing can surpass the mass of pink flowers which it shows all season. Blooms in 10 to 14 months.

DAHLIA LORD GOFF. Lilac pink, in great profusion.

JAPAN IRIS. New hybrids of all colors. Magnificent.

DIENER TOMATO. Grows to weigh 3 lbs. As smooth and beautiful as an apple. Most startling new vegetable.

And our Big Catalog, all for 20 cts.

Big Catalog, free. All flower and vegetable seeds, bulbs, plants and new berries. We grow the finest Gladioli, Lilies, Cannas, Irises, Peonies, Perennials, Shrubs, Vines, etc. All prize strains—many sterling novelties.

JOHN LEWIS CHILDS, Inc. Floral Park, N.Y.

in dairying, following the introduction of successful methods of cheese making developed by the United States Department of Agriculture. In each of these States two new factories were established during last year with the help of the Dairy Division specialists of the department.

The Grove City Creamery, Grove City, Pa., conducted under the direction of the Dairy Division, continues to manufacture

Reading Bone Fertilizer
Quality Service Satisfaction
Feeding the World: The American farmer's job. To do your utmost the land should be fed too. Stick to the old dependable when it comes to feeding the land—Reading Bone Fertilizer.
(This trade mark means quality)
Reading Bone Fertilizer Co., Reading, Pa.

Ask your dealer for Reading Bone Fertilizer.

Write for booklet and further information.

foreign types of cheese by methods developed in the laboratory of that division. The production of Roquefort, Swiss, and Camembert cheese during the year exceeded 130,000 pounds.

Talking about efficiency, a New Jersey authority says that whereas a century ago it was taking 75 per cent. of our population to grow our food, today 25 per cent. is doing it.

PHILADELPHIA INTER-STATE DAIRY COUNCIL NOTES

Dr. Hannah McK. Lyons, of Lincoln University, Chester county, Pa., well known to many of our readers as an active Granger, has become affiliated with the Council to do special field work. The Council has at present the following members in the various groups. None of the groups, as announced, are complete.

Farmers Group

F. P. Willits, Pres. of Inter-State Milk Producers Association; A. A. Miller, Editor "Milk Producers Review"; R. W. Balderston, Sec. Inter-State Milk Producers Association.

Public Group

Dr. C. L. King, Pennsylvania Milk Arbitrator; Mrs. H. C. Boden, Philadelphia Fair Price Commission; Miss Alice Johnson, Supt. Domestic Science, Philadelphia Public School Department; Miss Louise Johnson, Supt. Philadelphia Public School Nurses.

Dealers Group

Henry Woolman, Supplee, Wills, Jones Co.; Thomas Harbinson, Harbinson's Dairies; C. R. Lindbach, Abbots Alderney Dairies; Henry Dolfinger, Dolfinger Dairies.

Manufacturers Group

P. E. Sharpless, P. E. Sharpless Co.; M. R. Nissly, Pennsylvania Milk Products Company.

The "Mechanical Cow" which was such a sensation at the Harrisburg and Trenton shows, is now being exhibited in Philadelphia show windows in connection with exhibitions and demonstrations of the food value of milk. This exhibit is booked for many points in the state.

An extra copy of the film "Fountain of Youth" has been purchased and will now be available for out of town exhibitions.

A little play for school children called "The Milk Fairies," portraying the need of milk in the diet of the child, will be given in co-operation with public schools during the coming months. Miss Fitzgerald of the National Dairy Council will have charge of training little participants in the various cities.

COMMUNICATION

The following resolution passed at a meeting of the Concord, Delaware County Grange, held January 10, 1921, has been sent the "Review" with the request that space be given the same in our columns.

Whereas: The prices of corn, oats, and other grains and farm products, have depreciated from 25 to 50 per cent. during the past year.

Resolved: That we demand that the manufacturers of and dealers in artificial fertilizers shall meet this reduction by a proportionate difference in the price of their fertilizer and that we urge the members of the Grange and other farmers to refrain from buying from them until such reduction is made.

Concord Grange.

Many cheese factories in various parts of the country are returning their patrons, the milk producers, from \$1.75 to \$1.90 per hundred pounds for winter milk. In the West, as low as \$1.60 for 3.7 fat milk has been paid.

Bud Hicks, he was a simple lad, Who never done no harm. He milked a cow from the left hand side, And now he's left the farm.

—Ex.

AGRICULTURAL WEEK TRENTON, N. J.

The Sixth Annual Meeting of the New Jersey State Agricultural Convention was held in the armory, Trenton, N. J., January 11th to 14th inclusive.

In addition to an elaborate exhibition of farm products, machinery, poultry, etc., meetings of the various State agricultural organizations were held during the week.

The armory was well filled with various farm products, county exhibits of potatoes, corn and other products were elaborate. Apples were shown in profusion. There were elaborate displays in connection with home economic work, dairy exhibits, pure bred cows, prize winning bulls, calves, etc.

Dairy products were also displayed, particularly in connection with milk for general consumption.

The Inter-State Milk Producers Association, at its booth, demonstrated by a "mechanical cow" and other data the food value of milk. The "mechanical cow" proved a very attractive feature of the exhibit.

Mercer county for the second consecutive year won the inter-county potato competition.

Various organizations holding meetings during the week included the New Jersey State Horticultural Society, New Jersey State Poultry Association, New Jersey State Dairymen's Association, Holstein-Friesian Association, Co-operative Association of New Jersey, New Jersey Guernsey Breeders Association, State Potato Association, New Jersey Alfalfa Association, New Jersey Bee Keepers Association, New Jersey Association of Nurserymen, New Jersey State Swine Growers, Home Economics Workers, etc.

On Thursday evening the State Dairymen's Association held a banquet at the Trenton House. H. W. Jeffers acted as toastmaster. Representatives of the Holstein Friesian, Jersey and Guernsey Breeders Associations made addresses. R. W. Balderston, secretary of the Philadelphia Inter-State Dairy Council, made an interesting address on the Dairy Council work, in connection with which a milk film, "The Fountain of Youth" was shown. M. D. Munn, president of the National Dairy Council made an address on the work of the National Council in other states and advocated the co-operation of the dairymen of New Jersey in this work.

CATTLE SALE ADVERTISING

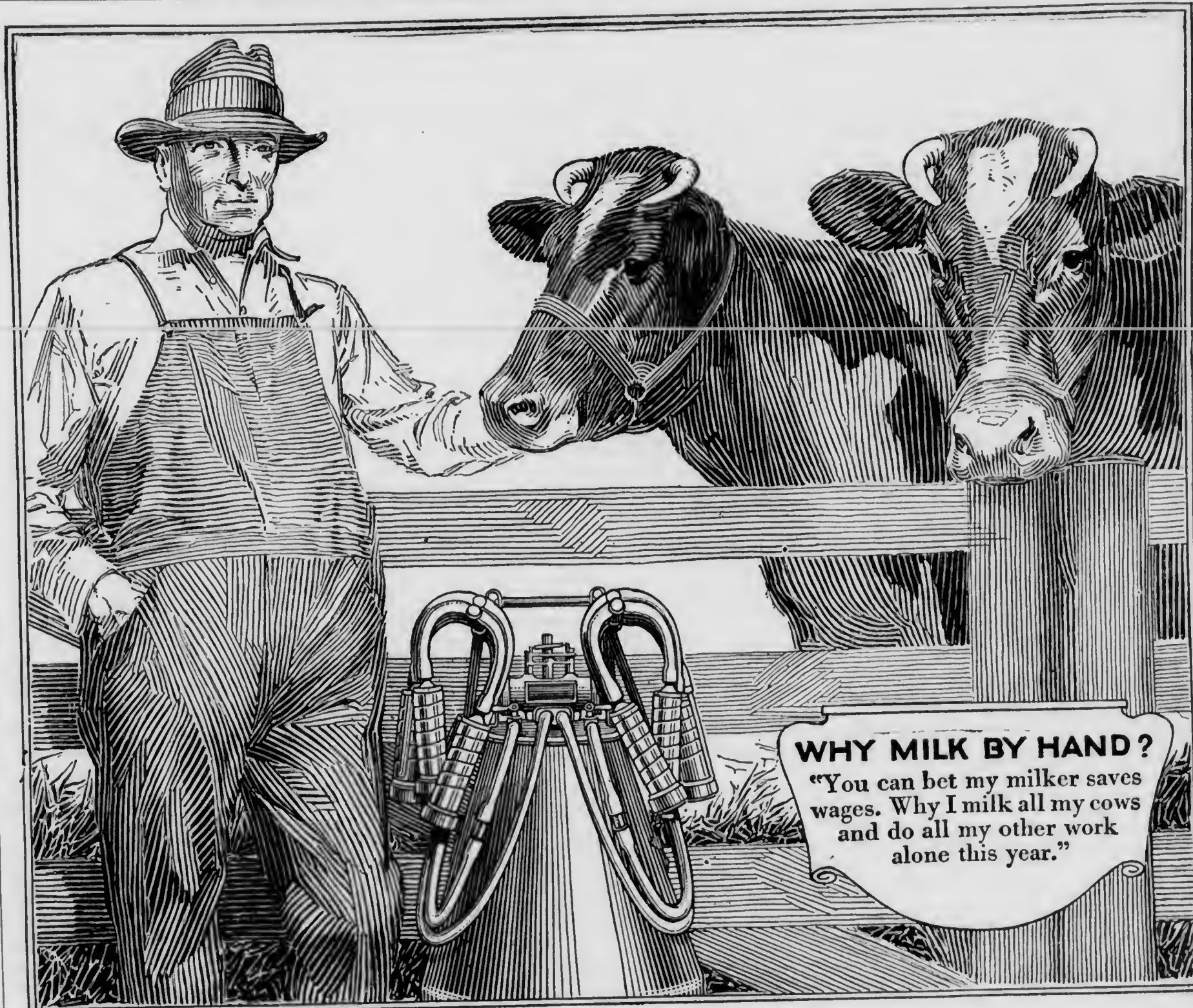
Many of the dairymen in the Philadelphia Milk Shed have been of the opinion that it is necessary to go to some distant State to obtain the proper strain of breeding stock in order to build up their herds.

These are, nevertheless, a large number of breeders, right in their home territory, who have for sale, just as good stock, perfectly acclimated which would prove just as satisfactory if the buyers knew where to obtain them.

Such breeders are "hiding their light under a bushel" and in order to give our members an opportunity to come out into the open, the Milk Producers Review has decided to extend to its members the opportunity of advertising their stock in the Cattle Sales Department at a reduced rate.

We feel that you should educate prospective purchasers to buy at home. It may take a little time, but the cost will fully warrant the expense.

Get in on this now. Write for our rates, they will interest you.



"The machine made it possible for me to do my work alone this year and more than paid for itself in the savings of wages this summer." —WILL HANEFELD.

How Perfection Pays For Itself

NO doubt you have often thought, "If I could only do the milking I could get along with less help or even do my work alone." Here's the opportunity to put that thought into action. Get a Perfection and you can do your work with less help or alone.

One man with a Perfection can milk the same number of cows as three hand milkers. You can easily milk 24 to 30 cows an hour with the Perfection Milker.

Thousands of owners say that Perfection easily pays for itself in less than a year on wages saved. But

more than this the Perfection is unusually low in upkeep and costs but a few cents a day to operate.

Futhermore owners say, that their cows give more milk when milked with the Perfection. Cows like the Perfection's natural action. It's just like their calf's milking.

You are paying for a Perfection every year in wages to hired men—why not have it?

Send for Catalog

Send for your free copy of our book, "What the Dairymen Wants to Know." It answers every question about milking machines. At the same time we will send the names and addresses of Perfection owners near you. Why Milk By Hand? Perfection milking is more profitable.

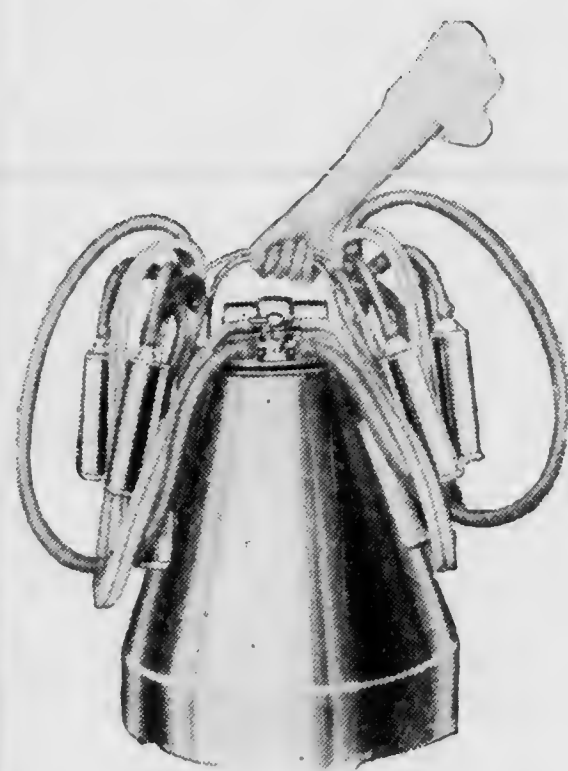
Perfection Manufacturing Company

448 S. Clinton St.
Syracuse, New York

2168 E. Hennepin Ave.
Minneapolis, Minnesota

PERFECTION MILKER

The Nu-Way Sanitary Milker



To meet the varied conditions today existing with milk production the country over, a milking machine to be thoroughly and generally successful must be built and distributed by practical men who know those conditions,—and that knowledge can only come from long experience.

In the Nu-Way machine are many advanced features of genuine importance such as the alternate milking of two teats at a time; observation of the milk flow at each teat cup; ability to sterilize every part coming in contact with the milk; a pulsator that gives an absolutely uniform action (constructed without piston or diaphragm); and the sanitary teat cup with a lining of pure gum that will positively not absorb fat.

It is one thing to simply sell a milking machine and quite another to sell complete milking machine satisfaction. We are making no idle claim when we say that is precisely our policy.

Therefore, if you are considering the purchase of a milker we feel you owe it to yourself to investigate the Nu-Way. The catalogue will be gladly mailed on request and will in no way obligate you.

STANDARD SUPPLY COMPANY

WEST CHESTER, PA.

General distributor for

Nu-Way Sanitary Milkers

in Pennsylvania, New Jersey,
Maryland and Delaware

Both 'phones



LEWIS LINSEED CAKE AND LINSEED CAKE MEAL

Are absolutely pure. The Cake is compressed Seed that can be broken up as you need it. The CAKE MEAL is finely ground—ready for use.

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"The Price of Milk"

By Clyde L. King, Ph.D.

Formerly
Chairman, Governors' Tri-State Milk
Commission (Pennsylvania, Maryland,
Delaware), Federal Milk Commissioner for
the Eastern States, Milk Price Arbitrator
for the State of Pennsylvania.

**Comprehensive Treatment of the
Milk Industry in All Its Phases**

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Interest in the Price of Milk.
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terest in Milk Distribution.
Part 3. Fair Price Policies. 13. The
Food Value of Wholesome Milk. 14. Co-
operation and Price. 15. Fair Price
Policies.
Endorsed by Herbert Hoover, former
Food Administrator; John LeFevre, In-
ternational Milk Dealers Association;
Margaret H. Boden, Chm. Food Section,
Philada. Fair Price Commission; R. V.
Balderston, Sec'y, Inter-State Milk Pro-
ducers Association.

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Producers Assn.**

721 Reed Bldg., Philadelphia

ASSOCIATION COWS AVERAGE 5,980 POUNDS MILK OUTPUT

Tabulation of the yearly records of 38,532 cow testing association cows has brought to light much valuable information on the relations between milk and butterfat production, butterfat test, income over cost of feed, and other factors, say specialists of the United States Department of Agriculture. The average milk production per cow-year was 5,980 pounds; butterfat, 246 pounds; butterfat test, 4.11 per cent.; income over cost of feed, \$55.69; returns for \$1 expended for feed, \$2.11.

The records show that in those associations where the work has been continued for a long period the production has generally increased from year to year. As production increased, the income over cost of feed increased rapidly, and for each increase of 50 pounds in butterfat there was an increase of \$15 in income over cost of feed.

Cows that freshened in the fall produced more milk and butterfat and greater average income over cost of feed than those which freshened in the spring or summer. Large cows excelled small cows of the same breed in production of milk and butterfat and in income over cost of feed. As the butterfat test increased, the average production of butterfat advanced and the average production of milk declined.

These records also indicate that cows remain in the herd an average of about 4.7 years.

FELTON LOCAL ORGANIZED

The Felton (Delaware) Local of the Inter-State Milk Producers Association, was formed on January 7th, 1921. With a total number of eighty shippers of milk at Felton, seventy-four are members of the association. J. Harold Shabinger was elected president, Walter Hughes vice president, Grover Dill secretary, and Byron Frazier treasurer, of the new local and all are located at Felton, Delaware.

PERSONALS

Frederick Shangle, treasurer of the I. M. P. A. and Miss Myrtle Barger, of the Philadelphia Inter-State Dairy Council, attended the show of the New Jersey Agricultural Convention, at Trenton, N. J. and were active in receiving our members and disseminating information regarding milk problems at the association booth.

H. D. Allebach, vice president, spent the best part of a week in January, visiting locals of the Inter-State Milk Producers Association in Blair, Huntington and Bedford counties.

F. P. Willits, president and H. D. Alebach, vice president and sales manager of the Inter-State Milk Producers Association, spent several days at the Fifth Annual State Farm Products Show in Harrisburg, last month.

R. W. Balderston, secretary of the Inter-State Milk Producers Association and also secretary of the Inter-State Dairy Council, was in Harrisburg during the State Farm Products Show. Mr. Balderston attended many of the meetings of organizations identified with the dairy industry, at several of which he made addresses.

A. A. Miller, editor of the Milk Producers Review, and Miss Myrtle Barger, of the Inter-State Dairy Council, were in attendance at the Inter-State booth at the Fifth Annual State Farm Products Show, Harrisburg, Pa., January 25th to 28th inclusive.

JANUARY MILK CONDITIONS

(Continued from page 1)

surplus into butter, have been forced to order their producers to hold back a portion of their supply. This is most inconvenient to the producer as well as being unprofitable.

The position of the manufacturers of condensed and evaporated milk is still very unfavorable. Manufacturers in this territory, representing probably 6 per cent. of the milk supply, are still paying irregular prices, although by far not as low as are being paid in other territories. For the most part prices paid condensary patrons have been fixed by conference between the producer and buyer. There has been one alternative for the manufacturer—either compete with other manufacturers, who pay lower than current prices for whole milk or shut up their plants. In some districts plants have been closed since October of last year. In this territory plants have remained open and prices paid in accordance with local conditions. In some nearby markets less than \$2.00 per hundred has been realized from milk being manufactured for the farmers account.

The condensed milk market shows little change. Open market trading has been light much of the business being of the hand to mouth order. With declining whole milk prices in some cities, lower prices for condensed products are being anticipated. Stocks of high priced manufactured goods, made at high milk and sugar prices show little decline, although most of the smaller manufacturers in this territory have taken their losses and moved most of the high priced goods. Middle western condensed milk makers have offered car load lots of fresh packed evaporated at \$4.75 and \$5.00 per case, free along side ship, for export, but find no takers. This is equivalent, according to a manufacturer in this district, to \$2.15 to \$2.40 per hundred at western plants.

The butter market has been steadily declining throughout the month. Early in January 92 score creamery butter in New York City was selling at 57½ cents a pound. The price has been steadily falling off and on January 29th was quoted at 49½ cents a pound, the low point for the month. At times the market declined 3 cents over night, with but slight recovery. The influence of heavy arrivals of foreign butter had a most unfavorable influence on the market.

In one week over a million pounds of butter were received in New York from Denmark by one steamer, and at the present market price some of this butter was withdrawn as it could not be profitably sold.

Efforts to include a duty on this foreign butter in the tariff bill now before Congress, should, if the bill becomes a law, restrict these heavy importations.

The basic and surplus buying plan under which the milk is sold in this territory became effective, as far as surplus is concerned, in January. The surplus price, based on 92 score solid packed creamery butter, New York City, plus 20 per cent, was \$2.53 for 4 per cent. milk at all receiving points. This price is paid for all milk in excess of the basic quantity established by the shipments made during October, November and December, 1920. New dairies or producers changing from one buyer to another after January first will have to assume a basis of 50 per cent. basic and 50 per cent. surplus, until they have established a basic standard in October, November and December next.

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Lull-Up Feed Saving Manger Curb saves many a pound of feed.

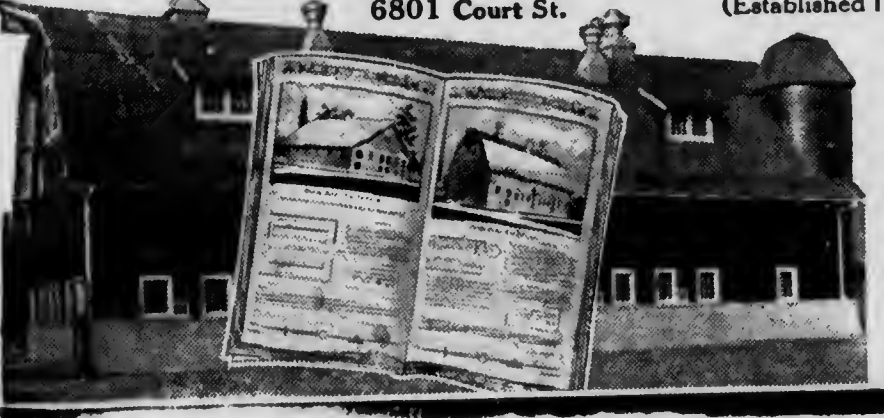
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Through over 50 years' experience in building Louden Equipment, we know that any equipment used in connection with live stock must be simple, strong, free from trouble-making attachments and must offer no chance for injury, at the same time be pleasing in appearance. Louden Equipment is distinguished for all of these qualities—and more. Louden Equipment is not costly. Meets the requirements of the smallest general-purpose barn, as well as of the largest dairy barn—always pays its way even with a few cows.

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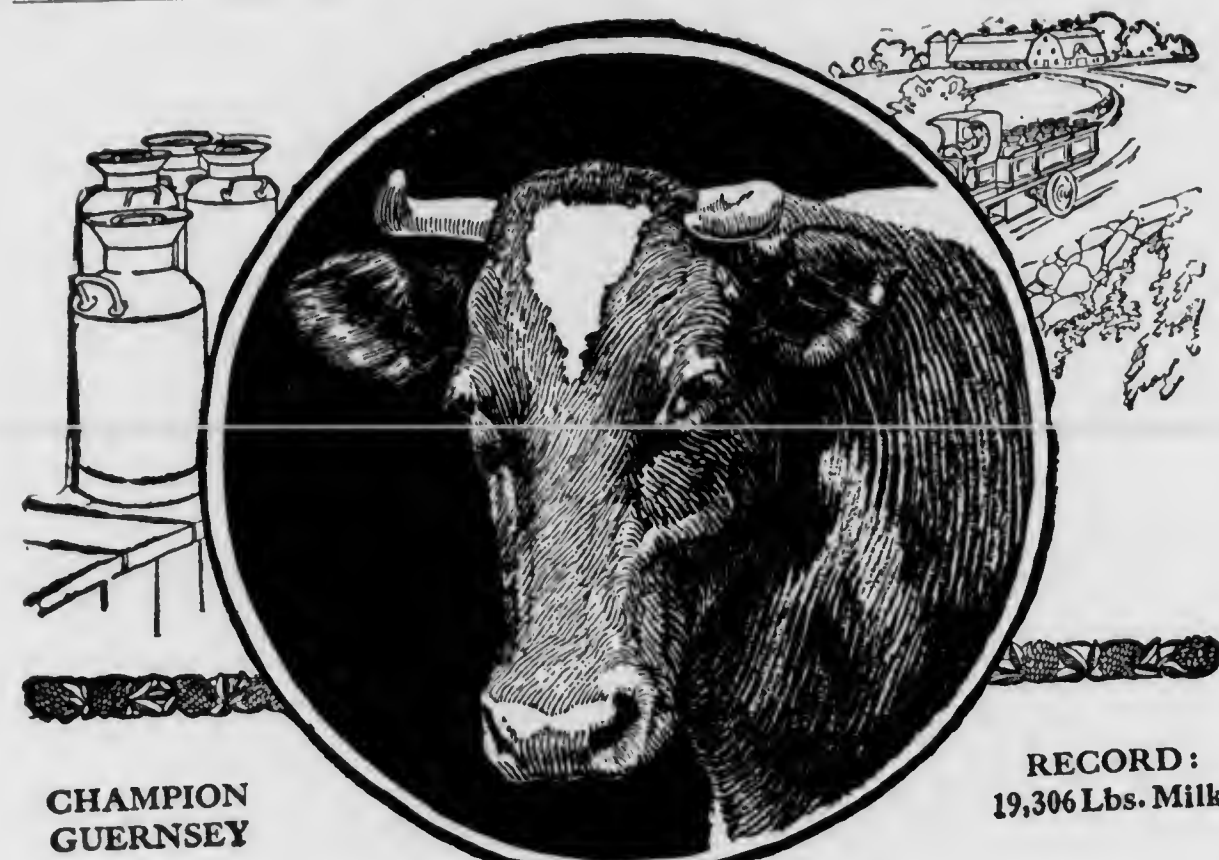
Free booklet on cattle feeding on request

Universal Molasses & Products Co.

32 COURT STREET BROOKLYN, NEW YORK

At the present writing the price for basic milk remains unchanged at 8 cents per quart and \$8.08 per hundred, in the 50 mile zone for milk testing 4 per cent. butterfat.

The chief value of cowpea hay lies in its high percentage of digestible protein. This has been verified by numerous feeding tests.

RECORD:
19,306 Lbs. Milk

The real facts on Big Milk Production

THE function of milk-making depends so entirely on the health and activity of the vital organs directly concerned, that the slightest loss of vigor in these organs affects at once both the quantity and quality of the yield.

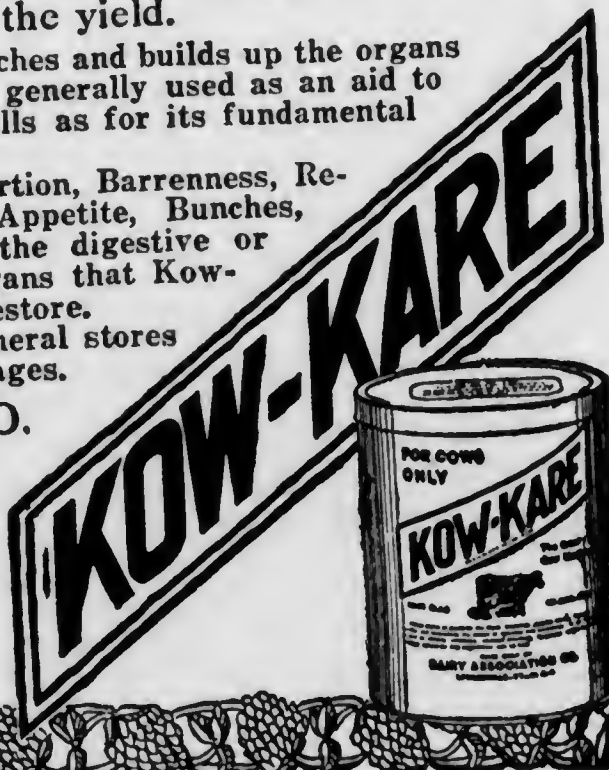
Because Kow-Kare so quickly reaches and builds up the organs of production, it is fast becoming as generally used as an aid to production and a PREVENTIVE of ills as for its fundamental use in treating disease.

Most cow diseases—such as Abortion, Barrenness, Retained Afterbirth, Scouring, Lost Appetite, Bunches, arise in an impaired condition of the digestive or genital organs. It is just these organs that Kow-Kare is designed to build up and restore.

Feed dealers, druggists and general stores sell Kow-Kare; 70c and \$1.40 packages.

DAIRY ASSOCIATION CO.
LYNDONVILLE, VT.

NOTE: The trade-mark name has been changed from KOW-KURE to KOW-KARE—a name more expressive of BOTH the PREVENTIVE and CURATIVE qualities of the remedy.



THE cows surely like Union Grains—and that's Nature's way of showing that it's good for them. It contains just the right elements to make cows happy and healthy, with the big flow of milk that it is sure to bring. Hundreds of the most successful dairymen who are feed experts themselves use Union Grains because in careful tests in which they weighed the milk and figured the cost of feed—Union Grains proved itself more economical. It saves the time and trouble of mixing, too, and makes it possible to use that time to better advantage. Feed Union Grains and you know the feed is always right. Know where you make and where you lose money by keeping a Ubiko Cost Sheet. It will tell you which feeds and which cows pay best. Write for it. It's free.

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MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS

COW TESTING RECORDS

AVONDALE-WEST GROVE COW TESTING ASSOCIATION
A report of the Avondale-West Grove Cow Testing Association for the month of January, reported by Thomas C. Y. Ford, shows that 15 herds with 206 cows in milk were tested. Two unprofitable cows were shown. One pure bred bull was purchased in the month and five pure bred cows replaced grades. Eighteen cows made a record of over 40 pounds of fat and four produced over 50 pounds fat. Twenty-four produced over 1000 lbs. milk, while six produced over 1200 pounds. An interesting development of the month showing records obtained from testing follows. One member bought two cows in August, 1920, for \$95, one was sold for \$100, the other freshened in September and in January produced over 40 pounds of fat. This dairyman said "the tests obtained influenced him to retain the cow in the herd and she has since proved her value."

The ten highest cows in butterfat for the month were:

Owner	Name of Cow	Breed	When Fresh	Lbs. Milk	% Fat	Lbs. Butterfat
Hoagland Gates	32	Hol.	Oct.	1738	3.7	64.3
Hoagland Gates	2	Hol.	Dec.	1426	4.0	57.4
Hoagland Gates	4	Hol.	Oct.	1503	3.6	54.1
Park McClellan	9	Hol.	Oct.	1220	4.1	50.0
B. F. Hickey	17	Hol.	Nov.	1293	3.6	46.5
B. F. Hickey	Horny	Hol.	Nov.	1116	4.1	45.7
Robert Balderston	29	Guer.	Dec.	915	4.9	44.8
Yeatman Bros.	6	Hol.	Oct.	945	4.7	44.4
James Barrow	Buttercup	Hol.	Dec.	1046	4.2	43.9
Dr. J. A. Webb	Spotty	Hol.	Dec.	1080	4.0	43.6

The report of the Westfield Cow Testing Association for the month of December, 1920, submitted by C. M. Jordan, tester, follows. There are 26 herds in the association. The ten highest producers were:

Owner	Name	Breed	Age	Lbs. Milk	% Fat	Lbs. Butter
T. W. Houston	Bossy	G. H.	4	1317	4.2	55.3
Alford Bros.	Kulkin	G. H.	10	1261	4.3	54.2
Alford Bros.	Houston	G. H.	6	1541	2.6	40.1
Alford Bros.	Blossom	H.	8	1400	3.1	43.2
J. H. Davis	Bessie	H.	5	1294	4.	44.
H. B. Chambers	Beauty	H.	6	1457	3.6	53.3
Joe Mozoky	Greer	H.	4	1116	3.5	39.1
R. J. Draken	Crispy	G. H.	4	1116	3.0	33.5
R. J. Draken	Henny	H.	2	1079	3.2	34.5
Alford Bros.	Zeppey	G. H.	3	1073	3.4	36.5

POULTRY TESTING RECORDS

Chester County has nine farms entered in this demonstration work. In November the county stood second and dropped back to eighth place for December, but to date stands third in egg production.

The demonstration farms of the county are: Mrs. R. A. McCorkle, White Horse, Pa.; Harry Anderson, Uwchland, Pa.; R. Chester Ross, Honeybrook, Pa.; Wm. B. Coates, Parkersburg; Pusey Cloud, Unionville; Mrs. Carl B. Thomas, West Chester, R. D.; H. O. Neiman, Pottstown, R. D.; Frank A. Keen, West Chester, Route 6.

The work started November 1st and so far the Barred Rocks owned by Mrs. McCorkle have led the county and stand third in the state.

HIGHEST RECORD FOR EACH VARIETY FOR DECEMBER

Variety	Flock Owner	County	No. hens	Av. No. eggs per hen to date
Anconas	Mark Wilcox	Bradford	10	14.4
W. Leghorns	W. F. Wilcox and Son	Bradford	65	13.9
R. I. Reds	Mrs. R. H. Evans	Luzerne	40	11.7
Barred Rocks	Mrs. R. A. McCorkle	Chester	55	11.6
Mixed	A. P. Naylor	Junata	198	5.4
W. Wyandottes	Mrs. Grace Ruckle	Columbia	59	4.5
Brown Leghorns	Mrs. H. J. Carner	Centre	185	4.2
Buff Leghorns	O. G. Lester	Wayne	173	3.8

STATE HOLSTEIN ASSOCIATIONS TO SPEND \$85,000

Approximately \$85,000 will be spent during 1921 by various State Holstein Associations in the interests of their members to develop and promote the dairy business in their respective territories.

The national body of the Holstein-Friesian Association of America has put the real punch into the State Associations during the past year. The idea was conceived about a year and a half ago, by R. C. Polock, of the Extension Service of the National Association.

Most State organizations lack only the funds to go ahead and develop within their own boundaries, better business methods in improving their herds and disposing of their surplus stocks. With this in mind, several State organizations were interviewed and eagerly accepted the help of the National Association to organize. Nine States and one group of States are organized as a result, and have a paid secretary on the job who spends all of his time in the interests of members of his State or district organization. The States organized and doing business are: Minnesota, Iowa, Illinois, Missouri, Wisconsin, Michigan, Ohio, New York, New Jersey and the New England States.

Some of the organizations have been

promoted on the straight membership fee; others on a per cow basis. The plan has been successful, however, no matter what basis or organization was adopted and means that during the coming year something in excess of \$85,000 will be spent in these ten States for the improvement of dairying, raising the standard of sales and offerings, adjustment of all controversies, selection of higher producing stock and co-operation in cleaning up of diseased herds and areas.

There were so many Inter-State members at the State Farm Products Show at Harrisburg, Pa., in January, that the officers were kept busy greeting them and learning about local conditions in the various counties. This large attendance was a convincing evidence of the size, power and strength of our organization. Delegations were in attendance from Bucks, Berks, Montgomery, Chester, Delaware, Lancaster, York, Adams, Cumberland, Juniata, Mifflin, Huntingdon, Bedford, Blair, Lehigh and Schuylkill counties, and there were doubtless members present from other counties. Mr. F. P. Willits, president; H. D. Allebach, vice president; R. W. Balderston, secretary; A. A. Miller, editor The Milk Producers Review and Mr. N. S. Gottshall, represented the association at the show.

DAYLIGHT SAVING AGAIN

A determined organized effort is under way to put over in some fashion or another, a daylight saving law on the same lines as prevailed during the late war, and it behooves the farmer, if he does not want one of the harshest measures of the war, from the standpoint of agriculture, placed upon him in peace times, he will have to get busy, and get busy quick.

From the industrial districts, particularly in the east, comes a loud call for a daylight saving measure. Arguments from a health and play standpoint are plentiful. It is no hardship for the working man, the office man or those employed in the plants and stores to begin their work an hour earlier, and thus gain an hour's play time at the end of the day. All work and no play, makes Jack a dull boy. We have heard and we believe it true, but why apply it only to those in and around the big cities and place the burden on the farmer?

Some say, "that farmer argument is all bosh." Of course the farmer may wear diamonds and drive automobiles—so does the town and city man—and by far and then some, in greater proportion.

If it were as easy for the farmer to adjust himself and his conditions to the proposed new order of things, as it is for the city man; if it only meant getting out an hour earlier, it might be all right, but, there is one great factor that blocks the farmer, and over it he has absolutely no control.

Nature's laws endured before those of man and will continue to endure forever. No man has been able to make the sun rise an hour earlier, no man can force the dew to fall or dry off in the morning an hour earlier, so that an hour's work can be gained in the field.

Who and by what law can nature be changed in its influences on farm stock? Cows can be milked an hour earlier, it is true, but a good part of that hour is spent in looking for and driving the cows from the pasture to the stable. Instinctively, cows will not "gather" an hour earlier, morning and evening, because the clock tells man that it is five o'clock.

The hour earlier to the farmer, many of whom begin their work in the summer months fully an hour before sunrise, does not mean any gain to the farmer. At certain seasons he must give every daylight hour to the harvesting of the crops. The hour earlier in the morning does not gain him anything. He has to wait until the dew is off the grain before it can be cut, he cannot quit an hour earlier than sundown, because in harvest season he needs every daylight hour to complete his work.

From the labor saving standpoint, daylight saving further burdens the farmer. We know—we have had the experience. An hour earlier to begin work so as to meet the hour earlier milk train, an hour lost waiting for the grain to dry before harvesting and a corresponding knocking off at 4.30 in the afternoon, leaving several hours of the best part of the day idle—yes idle—because the farm wife, who usually looks after the poultry, is tied to her job until the poultry goes to roost and the chicken house locked—and we all know that the chickens, turkeys and other fowls have not been educated on the hour earlier or later basis.

When the day's work is done—by farm time—and should the good wife and the children wish to go to town to attend the movies, well the movies begin at 8 o'clock daylight saving time, while the chickens went to roost at 8 o'clock farm time and the movies will be half over before they get started—and so it goes.

Don't Guess at What Feed Is Worth

Scales are used everywhere, from drug stores to steel mills, but they are no more important anywhere than at the feed trough and behind the cows in the dairy barn. A daily record of feed consumption and milk production is necessary for intelligent feeding. Weigh the feed you are now feeding. Weigh the milk you get. Put down each day, for each cow, what the feed costs and what the milk brings.

BUFFALO CORN GLUTEN FEED

Then get BUFFALO CORN GLUTEN FEED—the milk-producing concentrate—from your dealer. Mix up a mixture with wheat bran or other mill feeds, oats, etc. Make the BUFFALO CORN GLUTEN FEED one-third, one-half or more of your mixture. Then feed this mixture to your cows, each cow according to her production, but give every cow enough to show what she can do with good feed when she gets a chance. Weigh each cow's feed. Then weigh her milk. A little figuring will convince you that it pays to feed BUFFALO CORN GLUTEN FEED.

Write us for literature giving mixtures for feeding BUFFALO CORN GLUTEN FEED—and sample if you would like one. If your dealer cannot supply you, tell us who and where he is.

Corn Products Refining Co.
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THE FEED THAT MAKES THE YIELD



The even stroke and positive action of the

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Pulsator in connection with the Empire Patented three way squeeze in the Teat Cup are two reasons why there are more Empire Milkers in use in this territory than all other makes. We will take pleasure in mailing you descriptive catalog on request.

"Ask the dairyman who has one"

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NOTE

C. Allen May, secretary of the Dover Local of the Inter-State Milk Producers Association, Dover, York county, Pa., was awarded the first prize for farmers butter at the Pennsylvania State Farm Products Show, with a score of 94.5.

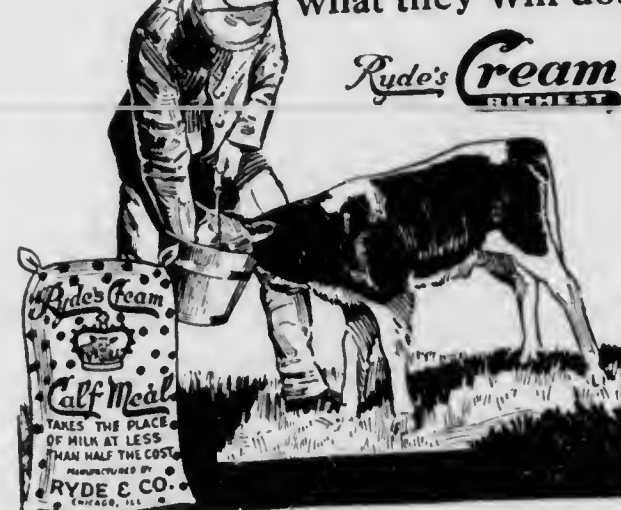
Interesting for the farmer—the producer of food for those who have been at play since 4.00 o'clock city time, isn't it?

Mr. Farmer get busy—get busy now—hunt up your legislator, tell him where you stand, protest vigorously on this daylight saving law or it will be put

over. Chambers of commerce, stock exchanges, city councils, etc., have all been going on record as favoring the plan. Act now, the same old troubles that you experienced and patriotically put up with during the war stare you in the face. As a peace time measure do you propose to stand for it?

IMPROVE YOUR HERD

Cut Out the Boarders—With the high cost of feeds dairying is a close proposition. Replace the poor milkers with cows you raise yourself and know what they will do. The best for this purpose is



A complete food for young calves. Supplies them with every feeding element necessary for rapid growth in the most easily digested form. They thrive on it as on nothing else. Results Guaranteed.

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MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS

PENNA. STATE COLLEGE

(Continued from page 2)
calorimeter, the only apparatus of its kind in the country. It was completed in 1902 with the aid of the United States Department of Agriculture, planned, designed and built by Dr. H. P. Armsby, director of the College Institute of Animal Nutrition; J. A. Fries, assistant director, and Dr. I. T. Osmond, at that time professor of physics at Penn State. The Institute is primarily a research department for the study of those fundamental questions relating to the principles of nutrition upon which the science and practice of stock feeding are based. Use of the calorimeter makes it possible to determine, in addition to the visible waste products of an animal, the gasses it gives off in respiration and the amount of heat which it produces, and thus, by a comparison of income and output, to determine the exact nutritive effect of the feed.

There is a direct relation to dairy production in the work of the Institute. It consists in the scientific study of the relative values of stock feeds for the different purposes, as well as those factors relating to the animal, such as age, condition, breed, and individuality which may effect its efficiency as a mechanism for converting feed into useful products. The food is regarded especially in the light of a source of energy or fuel for the body. Then the efficiency of the animal in converting this energy into work or storing it up in valuable food products for the use of man is determined. The Institute is a part of the School of Agriculture and Experiment Station, and their efforts are combined in the interests of general agricultural advancement.

The tables for computing balanced rations for dairy cattle as arranged by Dr. Armsby after experimenting with the calorimeter are recognized throughout the country as authentic, expert advice, and adopted everywhere as the last word in feeding. His working out those fundamental facts which enable the dairy farmer to mix together different feeds and produce a well balanced ration has an every day application in this and other countries.

The Pennsylvania State College trustees will ask the State Legislature now in session at Harrisburg for approximately six and a half millions for maintenance, summer sessions, extension work and buildings to cover the program of work for the next two years. It is of special importance that the general maintenance item of \$2,900,000 be provided at this time if the grade of work that has characterized the institution is to be continued with any degree of success. The past two years have been forded under the great handicap of the shrunken dollar, the million and a quarter granted for maintenance by the last Legislature being insufficient to meet adequately the rising costs of that period. Many instructors have been lost to the college through inability to pay salaries that would hold them from outside offers. The state appropriation under which the college is now operating was based upon costs of over two years ago. Since that time it has been necessary to advance salaries and wages 50 per cent. on an average in order to maintain organization personnel.

Fourteen states in the Union have provided assured incomes to their state institutions by the establishment of special taxes for that purpose. Prominent among these are Ohio, Illinois, Indiana, Wisconsin, Minnesota, Michigan, Nebraska and Oregon.

WAR PRICE READJUSTMENT

Influence on the Farmer

Probably the foremost topic under consideration in practically every industrial as well as agricultural occupation, is that of price readjustment, with all its attending pros and cons, influences, favorable and unfavorable, according to the light in which it may be considered.

The consumer, as a rule, has but one viewpoint. The lower prices go, the better he is satisfied—and let the chips fall where they may. What does he care as to who suffers the losses, as long as he can buy more cheaply.

It is true, that in many cases, the buying power of the consumer has been restricted. Labor, in industrial fields, has been decidedly less active and its buying power has, to a certain extent, decreased.

That some readjustment from the level of war time prices must result is inevitable, but many hoped that the movement would be deferred or be so gradual that its effect on the trade would not radically effect business and avoid sharp reactions, with their attending uncertainties in every direction.

So many factors, however, enter into a nation wide price readjustment that it is practically impossible to bring a lower price level, in any commodity, without bringing a sharp loss in one or more stages of the usual steps in trade. Customarily, these various factors endeavor to move their losses on down the line, until the producer of the actual raw material is reached. Unless these producers are strongly organized, they are not able to resist an unjust cut and must, from necessity, assume or have thrust upon them, the heaviest burden in the downward readjustment.

The farmer is classed among these original producers of raw material. In very many cases he is not organized and from necessity must take his bumps. On the other hand, the nature of his product, is, in many cases, perishable and he has no alternative except to take what he can get as a selling price, and pocket the losses.

Many other producers of raw materials, however, whose lines are probably not so diversified and are of such a character that they can be held, are better enabled, through organization, to combat unduly low prices for their products.

The farmer today is largely handicapped by the necessary conduct of his business. In general agriculture he is dependent on weather conditions. A good season means good crops; a bad season is the farmers loss, due in many cases to conditions entirely beyond his control, such as wet weather or drought. He can not stop his growing crops because of too great a supply, neither can he increase immediate production to cover a shortage. His plans must be made in advance and he must take the breaks in the market when his crops are harvested.

Under urgent request by the government, as a patriotic duty and as a war time measure, the farmer largely increased the acreage of grain crops planted. With governmental assurances of minimum prices, even though in many cases unprofitable, bumper crops were produced.

(Continued on page 14)

FIFTH ANNUAL PENNSYLVANIA STATE FARM PRODUCTS SHOW

(Continued from page 1)

ing industry. On this floor was the booth and exhibit of the Inter-State Milk Producers Association, and the Inter-State Dairy Council, also the headquarters of the Pennsylvania State Dairy Council. The illustration on the front page shows the booth, which contained one of the most interesting exhibits, the "Mechanical Cow." Almost uninterruptedly the rail of the booth was crowded with interested visitors interested in the "Eat More Milk Campaign," as illustrated by the exhibit. During the greater part of the show visitors passed this booth at the rate of 1000 per hour—these figures being based on actual counts. In addition to the cow exhibits, a display was made showing the food value of milk—from a dollar and cents standpoint, with other important elements of food used in the daily diet.

To describe the nature of the various exhibits shown would take too much space. Briefly, the second floor of the Emerson-Bantingham Building was devoted largely to displays of fruit, home economics, co-operative movements, vocational school work, various seeds, implements and appliances used in those industries.

In the Overland-Harrisburg Building, were shown the live stock exhibits, largely with a view of demonstrating the value of breeding, etc. Cows, bulls and heifers of varying degree as to profit were shown. Also swine, sheep and poultry. An interesting exhibit of wool and its relative value were also shown. On the second floor of this building was the corn and potato show, together with the heavier agricultural implements, tractors, and other machinery. Fertilizers, lime and other soil improving materials were also exhibited on this floor.

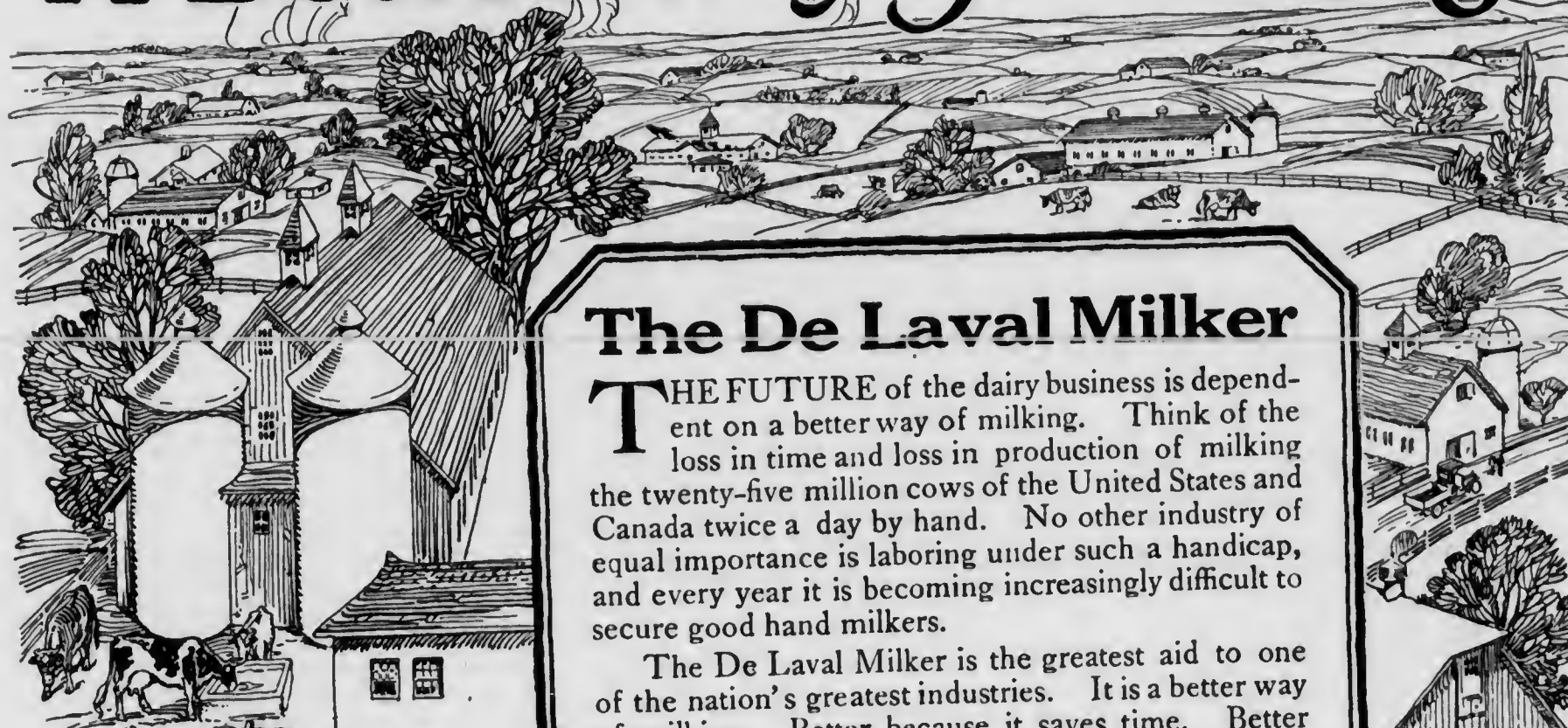
The annual corn judging contest by over one hundred boys, representing every section of the State, was one of the features of the show. The first prize was won by the Library Vocational School, Allegheny county, Edwin Trux and Charles Hart; second prize, Westmoreland County Team, Joseph Jones and Amos Fox, and third prize, Honeybrook Vocational School, Chester county, George Berstler and Roosevelt Reiter.

Awards for milk displayed were as follows: Certified milk—First prize, Belle Alto Farms, Wernersville, Pa., score, 99; second prize, International Correspondence Schools, Scranton, Pa., score, 98.9; third prize, Edgewood Dairies, Woodside, Pa., score, 96.9. Pasturized milk—First, Supplee, Wills, Jones Co., Philadelphia, 99.4; second, Abbott's Alderney Dairies, Inc., Philadelphia, 98.9; third, Woodlawn Dairies, 95.3.

The raw market milk prizes awarded were as follows: First, E. C. Meyers, Quakertown, Pa., 99.4; second, Benjamin Sharpless, West Chester, Pa., 99.3; third, E. Baker Pyle, 97.6, and fourth, Paul Woodman, Rushland, Bucks county, Pa., and George Ebert, Phoenixville, R. D., tied at a score of 97. The first prize for farmers butter was awarded C. Allen May, Dover, York county, Pa., with a score of 94.5.

The various organization meetings held in Harrisburg during the show week were numerous and well attended. The show was formally opened with a meeting in the auditorium, with fully 3000 in attendance. R. L. Watts, dean State College, presided and addresses

A Better Way of Milking



The De Laval Milker

THE FUTURE of the dairy business is dependent on a better way of milking. Think of the loss in time and loss in production of milking the twenty-five million cows of the United States and Canada twice a day by hand. No other industry of equal importance is laboring under such a handicap, and every year it is becoming increasingly difficult to secure good hand milkers.

The De Laval Milker is the greatest aid to one of the nation's greatest industries. It is a better way of milking. Better because it saves time. Better because it milks the cows with absolute uniformity from day to day, which De Laval users claim actually increases the flow of milk even over good hand milking. Better because it is easy to keep clean. Better because it is built to De Laval standards. And better because it is backed by De Laval service.

The De Laval Milker is ready to serve and save for you now—write for full information.

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CLOVER Much Lower Prices

Prices way below those of past few years. Qualities of seed never better. Hoffman's Clovers mean sure stands of grass—clean fields, free from weeds. Seed represents highest grades obtainable—thoroughly cleaned—tested for sound germination. Hoffman's Clovers will pay you! Write today for samples, prices and—

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Different from other catalogues—offers field seeds only, and only highest qualities of them. Offers 6 kinds of Seed Oats—one a genuine "Side" oats—unusual variety, heavy yielder. Specializes in Alfalfa—Soy Beans—Field Peas—Potatoes—Corn for Silage and Cribbing. Gives valuable pointers. Write today—mention this ad.

Guarantee: Every bag of Hoffman's Seeds you buy must please you. If the quality of any is not up to what you expect, return it—we'll do the same with your money and pay round-trip freight. Hoffman's Seeds will please you and pay you!

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were made by Hon. William C. Sprout, governor of Pennsylvania; Thomas E. Finegan, Superintendent of Education, and Frederic Rasmussen, Secretary of Agriculture.

Meetings were also held by the Pennsylvania State Dairy Council, State Horticultural Association, Pennsylvania Breeders and Dairymen's Association, Pennsylvania Holstein Friesian Association, Inter-State Dairy Council, Pennsylvania Potato Growers Association, State Bee Keepers Association, Pennsylvania Sheep Breeders and Wool Growers Association.

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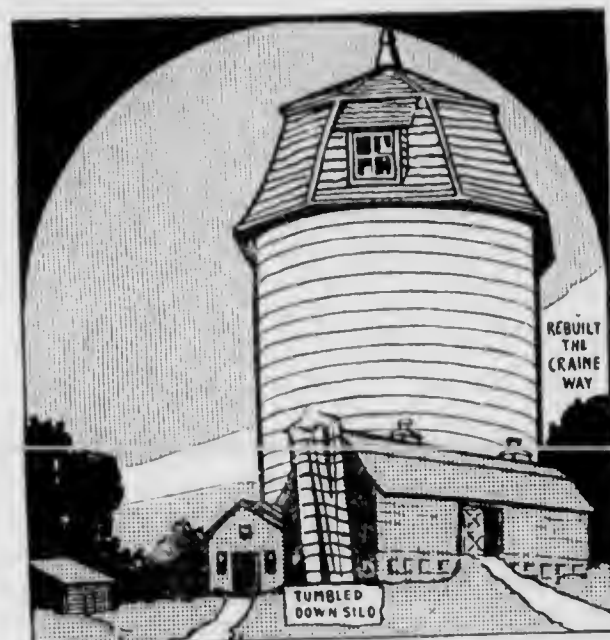
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ciation, Pennsylvania State Veterinary Association, and various bodies and organizations identified with the State College.

Considerable comment, largely favorable to the State Fair movement, under the direction of the State Department of Agriculture was heard, more particularly in that it would provide facilities

to house this great annual event—the Annual State Farm Products Show, under one roof and provide better facilities for meetings of the various organizations identified with agriculture, held at this time.

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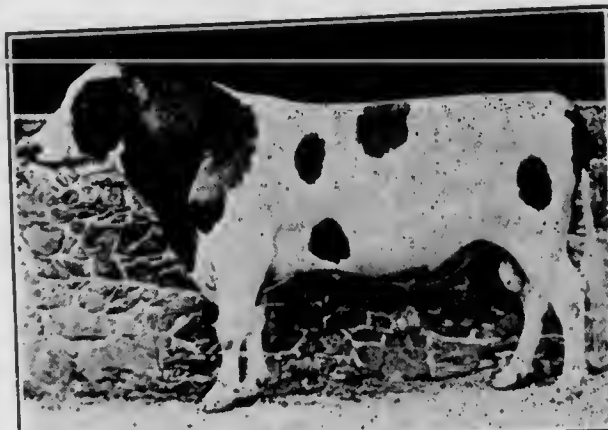


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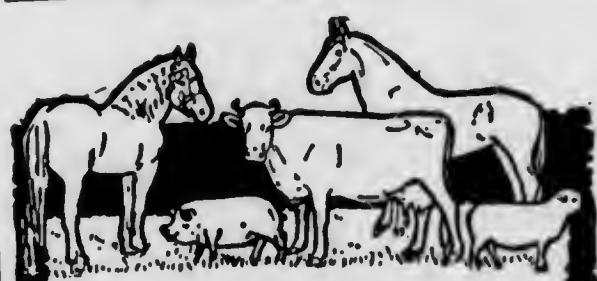
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Quickly, easily, cheaply aerate and cool milk in one operation. Save Money.

GENUINE IMPROVED CHAMPION
halts germ growth—removes animal and feed odors—saves time—easy to clean. If your dealer cannot supply you, write for Free Folder.

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DUROCS OF QUALITY
GOOD PIGS FOR SALE NOW**

D. M. STOUTT, HERSHEY, PENNA.

Pennsylvania now has 412 accredited herds and ranks third in the number of accredited herds in the United States.

WAR PRICE READJUSTMENT

(Continued from page 12)

Not only are these conditions true in the grain crops, but that vital industry, absolutely necessary to the life and growth of mankind, the dairy industry, is effected by the same conditions that surround agriculture in general. This industry is, in fact, even more hazardous than agriculture in general, and promises less return for the money invested than most of the ordinary occupational undertakings.

A manufacturer or producer engaged in almost any line of business, other than agriculture, can, in periods of dullness or over supply, temporarily shut down his plant, not so the dairyman. A herd of cattle once broken up, can not be reassembled or developed in years, and then the dairyman must take the risk of his young stock proving profitable when it comes into production.

There is a danger in driving prices received by the basic producer to a point where he will discontinue business and stop production, either from the standpoint of being unprofitable or as a money losing game.

Conditions are no doubt confusing at the time, not only to the farmer, but to other producers as well. Everything should not be based on present conditions, although they are discouraging, it's true. Economy should be practiced, readjustment made, and plans for the future considered.

General business will not always be unsettled as it now is. A new basis will be arrived at and there are still good things in store for us all.

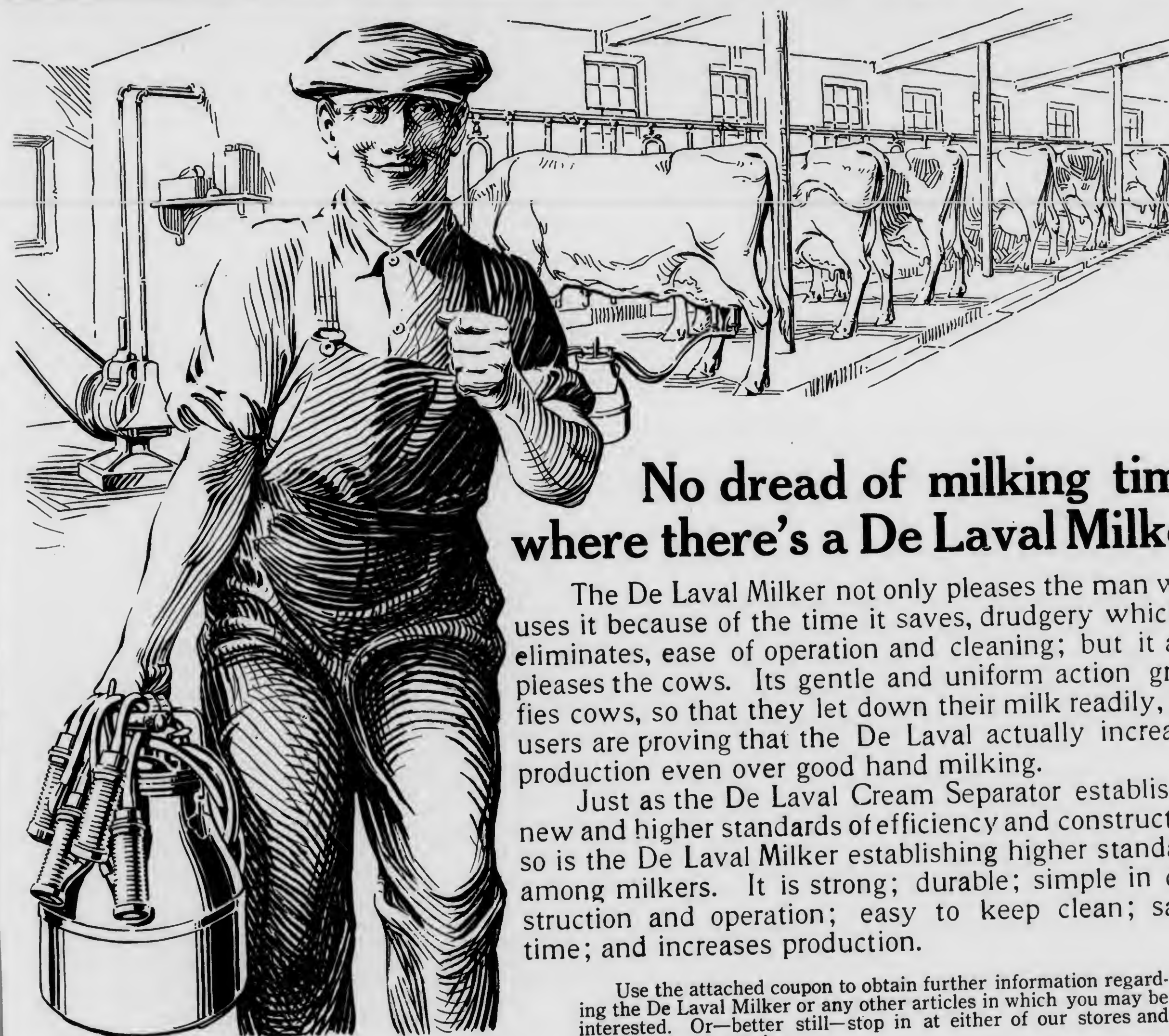
It behooves every producer, in whatever line engaged to observe closely, sit tight and take advantage of any opportunity and prepare for a prosperous up-building of business on the whole as soon as readjustments following the war time basis of inflated prices, inflated profits and inflated ideas are made.

DAIRYMEN SUSTAINED IN THE SUPERIOR COURT OF CALIFORNIA

The dairymen of California won a sweeping victory recently in a suit brought by the county of Sacramento against the Northern California Milk Producers Association, Inc.

The suit was brought by the county in an effort to dissolve the corporation of milk producers as it was so organized and conducted that its franchise should be revoked and cancelled and that there was a conspiracy to form a monopoly.

Peter J. Shields, Superior Judge, states in his opinion filed on motion by the defendant "on demurrer and to strike out," the contention of the plaintiff. "That the defendant was organized to develop the dairy business and to prepare and market dairy products. It seems to have confined itself to that business and to be going through the formative experiences of organization, acquiring machinery, sites and equipment, and the means by which it may conduct and extend its business. It may be otherwise, but before the law will make it the object of its destructive judgment, serious charges to the contrary must be made, bringing this case within the rule above stated. Clearly this has not been done. Before that end the supplemental motion to strike out will be granted, the demurrer sustained and the plaintiff given 30 days in which to prepare and file an amended complaint.



No dread of milking time where there's a De Laval Milker

The De Laval Milker not only pleases the man who uses it because of the time it saves, drudgery which it eliminates, ease of operation and cleaning; but it also pleases the cows. Its gentle and uniform action gratifies cows, so that they let down their milk readily, and users are proving that the De Laval actually increases production even over good hand milking.

Just as the De Laval Cream Separator established new and higher standards of efficiency and construction, so is the De Laval Milker establishing higher standards among milkers. It is strong; durable; simple in construction and operation; easy to keep clean; saves time; and increases production.

Use the attached coupon to obtain further information regarding the De Laval Milker or any other articles in which you may be interested. Or—better still—stop in at either of our stores and ask for a demonstration.

READ what the Manager of Breidablik Farm, Wilmington, Delaware, says of the De Laval Milker:

"The De Laval Milker has proved very satisfactory. It saves from two to four men and about an hour and a half at every milking. It is very simple to operate and to keep clean. In fact, so much so that a green man can do the work as efficiently as an old hand. It pleases the cows, as can be seen by our high records. Ten of our cows average over 10,000 pounds of milk a year. We have never missed a milking since we have had the De Laval Milker."

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Everything for the Modern Farm Dairy
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Butter—365 days—1091 lbs.
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"The Best Bred Bull in the World"

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The Greystone herd is one of the greatest Jersey herds in America and, in the line-breeding of the Financial King strain of Jerseys, are making great strides, both in type and production.

Tie up with the Greystone herd with a son of Financial Sensation, the \$60,000 sire.

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Tell us your wants and we can supply them at prices you can afford to pay.

Aged cows, bred to Glenury, an A. R. son of Finlayston.

Aged cows, bred to Rena's Baron of Highland, an outstanding son of Baron's Best of Bargenoch. Heifers, bred to these two great sires.

Young heifers.

Bull calves.

All the above stock carries some of the best producing blood of the breed with A. R. ancestry on both sides.

Herd free from tuberculosis

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Milk Producers Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE INTER-STATE MILK PRODUCERS ASSOCIATION, Inc.

VOLUME I

WEST CHESTER, PA., AND PHILADELPHIA, PA., MARCH, 1921

NUMBER 11

FEBRUARY MILK CONDITIONS

MARKET WEAK AND UNSETTLED

General market conditions during the month have shown but little indication toward improvement. The markets for milk and milk products generally have been weak with prices irregular. It is distinctly a buyers market. Influences both within and without the market do not

In some districts this has had the effect of materially lowering prices paid to producers.

Taken on the whole, milk consumption has been on a lower basis. This cannot be attributed to a high retail price, particularly in this district, which has

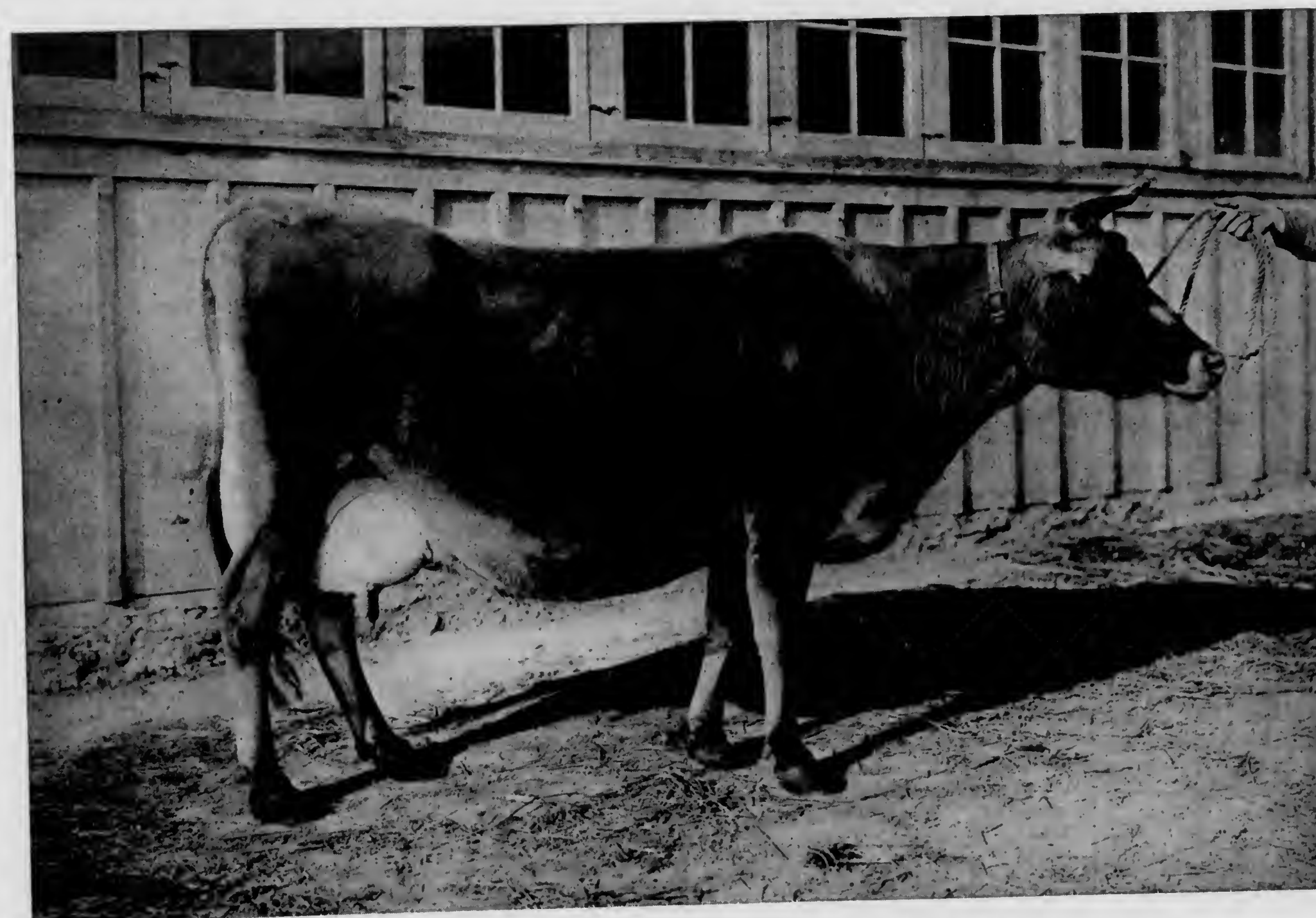
WHY JOIN A TESTING ASSOCIATION

By A. J. CRAMER, Wisconsin State Dairy Husbandman

A cow testing association consists of a group of dairy farmers organized for the purpose of securing the services of a man to weigh and test the milk of each cow in their herds one day every month for an entire year. These farmers must live reasonably near each other because

man to whom the milk is sold. It develops the co-operative buying of feed and it aids materially in selling cows because it supplies a public record in place of a private one.

From 25 to 50 cows are being eliminated each year from each cow testing as-



Twenty-one Years Old and Going Strong (see article page 9)

lend much encouragement to the situation. Taken on the whole it is largely a case of marking time and hoping for an early conclusion of the war time readjustment process.

As a rule the volume of milk coming into the market shows little change from January. In spots there has been a falling off while in other directions the supply holds its own. The amount of milk sold on which the surplus clause will apply will, on the whole, probably not exceed 10 per cent. There has been a surplus of whole milk in the market throughout the month. This is not only true of the Philadelphia market but is general throughout the country. As has been the case since early last fall, a large volume of milk which had been going to the condenseries, was diverted to the whole milk market when the condenseries closed or restricted production.

Much of this milk has been offered from distant points, purchased at low prices and offered in the larger primary markets at prices lower than those being paid by buyers to their regular patrons.

had the lowest price relatively of any of the large cities in the country. It is rather due to the decreased buying power of the public. Labor is far less actively employed, in many cases there has been, for a time at least, a total cessation of work and with this buying power decreased, consumption has also declined.

Prices paid producers in this territory have been practically unchanged. The price of whole milk delivered in Philadelphia has been maintained at 8 cents a quart or \$3.08 per hundred in the 50 mile zone for 4 per cent. butterfat content for basic milk. Prices at condensaries show a variation dependent on conditions at the respective points of delivery. In this connection prices are based on prices obtainable for condensed or evaporated milk or butter. The total amount of the milk produced which is affected by these conditions does not exceed 3% of the total volume of the milk produced in the Philadelphia Milk Shed. While this is an unfortunate condition,

it is necessary for the tester to visit each member's farm once each month. Twenty-six to thirty herds containing a total of 400 or more cows constitutes the required number. In some instances, we have as few as 250 and as many as 825 cows.

The expenses of the association are defrayed by charging from \$3 to \$4 per month without regard to the number of cows. By this plan, the members are more inclined to test every cow in the herd.

The tester's record will show the production of every cow. He locates the good and poor cows which cannot be found in any other way. The good cow will milk from nine to eleven months a year and will make a creditable record. It is a common practice to select the best and keep fewer cows and yet produce the same amount of milk and fat. The income above cost of feed from such a herd is larger and the work is less. There is a satisfaction in knowing what each cow produced on a given amount of feed. It provides a check on the tests of the

sociation because they are unprofitable. Between three and four thousand cows are sold as unprofitable annually by the members in the 110 active cow testing associations in Wisconsin. The 52,000 cows on test are owned by 3,500 members.

The average cow in Wisconsin produces about 185 pounds of fat per year, while the average Wisconsin cow testing association cow produces 260 pounds fat. The best herd in a cow testing association last year averaged 502 pounds fat or nearly three times as much fat as the average Wisconsin cow.

From our last year's records we find reports from 68 associations eliminating 1,500 unprofitable cows and the replacement of 363 scrub bulls by registered bulls. 71 per cent. of the members of the 68 associations reporting have registered sires heading their herds. About 20 months ago, there were only five associations reporting 150 herds headed by registered sires, while today, there are 48 associations representing 1,350 registered sires.

(Continued on page 16)

(Continued on page 15)

MILK SUBSTITUTES

Bills Introduced in Pennsylvania and New Jersey Prohibiting Their Sale

The continued investigations regarding the sale of milk substitutes or filled evaporated skimmed milk under various fanciful names, such as Hebe, Carolene, Nutro, Enzo, Nyco and probably in bulk, under no trade names at all, shows the sale of these substitutes or compounds is wide spread.

Not only in the State of Pennsylvania are these filled skimmed milk products marketed extensively but they are also sold in neighboring states.

A press clipping recently noted stated as follows: "Eleven milk dealers were convicted in — today of selling milk and cream adulterated with coconut oil. They were fined a total of \$4,850. The case was pressed on evidence obtained by the health department."

House Bill No. 497 was introduced in the Pennsylvania Legislature by C. E. Cook, of York county, having been prepared at the request of the Pennsylvania State Dairy Council.

The bill is as follows:

An act for the protection of public health relating to milk, cream, skimmed milk, condensed, evaporated, or concentrated milk, powdered milk, dried milk and dehydrated milk, ice cream and their fluid derivatives, prohibiting the introduction of foreign fats into them, regulating the sale of and defining condensed, concentrated and evaporated milk, stipulating penalties for the infraction thereof and providing for the enforcement thereof.

Section 1. Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in General Assembly met and it is hereby enacted by the authority of the same, that for the purpose of this act, condensed, evaporated and concentrated milk is defined as the product resulting from the elimination of a considerable portion of the water from the fresh, clean lacteal secretion, colostrum free, obtained by the complete milking of cows, properly fed and kept, said product to contain, when made from whole milk, without added sugars, all tolerances allowed, at least twenty-five and five-tenths per cent. (25.5%) of milk solids, including at least seven and eight-tenths per cent. (7.8%) of milk fat; when made from whole milk, with added sugars, all tolerances allowed, at least twenty-eight per cent. (28%) of milk solids, including at least eight per cent. (8%) of milk fat; and when made from skimmed milk to contain, all tolerances allowed, at least twenty per cent. (20%) of milk solids.

Section 2. It shall be unlawful for any person, firm or body corporate, by himself, herself, itself, or themselves, or by his, her, its or their agents, servants or employees, to manufacture, sell or exchange or have in possession with intent to sell or exchange, any condensed, evaporated or concentrated milk which shall not conform at least to the minimum standards set forth respectively in Section 1 hereof, and which, if contained in hermetically sealed cans, does not bear stamped or labeled thereon the name and address of the manufacturer thereof.

Section 3. It shall be unlawful for any person, firm or body corporate, by himself, herself, itself or themselves, or by his, her, its or their agents, servants

or employees to manufacture, sell or exchange, or have in possession with intent to sell or exchange, any milk, cream, skimmed milk, condensed, evaporated or concentrated milk, powdered, dried or dehydrated milk or ice cream, or any of the fluid derivatives of any of them, to or with which has been added, blended or compounded, any fats or oils other than milk fats, either under the name of said products or articles or the derivatives thereof, or under any fictitious or trade names whatsoever, provided however, that nothing in this act shall be construed to prohibit in the manufacture of ice cream the use of fresh eggs, and not exceeding one-half of one per centum of pure gelatin, gum tragacanth or other vegetable gums, or the sale, exposure for sale, and having in possession with intent to sell, ice cream so manufactured.

Section 4. It shall be unlawful for any person, firm, or body corporate, by himself, herself, itself or themselves, or by his, her, its or their agents, servants or employees, to sell or exchange, or expose for sale or exchange or have in possession with intent to sell or exchange any condensed, evaporated or concentrated, powdered, dried or dehydrated skimmed milk in containers, holding less than ten (10) pounds avoirdupois net weight, and is in hermetically sealed cans of said net content weight, or more, each said can shall bear the name and address of the manufacturer distinctly branded, indented, labeled or printed thereon, together with the words "Condensed Skim Milk" or "Dried Skimmed Milk" or "Powdered Skimmed Milk" in Roman letters of a size at least as large as any other words or letters appearing on said brand, indentation or label, and in no case less than one inch in height and one-half inch in width each.

Section 5. Any violation of any of the provisions of this act is hereby declared to be a misdemeanor, and any person, whether individually or as a member of a partnership or as a responsible agent or officer of a corporate body, who shall be convicted of such violation either on his own behalf or in the interests of a corporate body shall be sentenced to undergo an imprisonment of not less than thirty (30) days, nor more than sixty (60) days or to pay a fine of not less than fifty (\$50) dollars nor more than one hundred (\$100) dollars, or both.

Section 6. The Bureau of Foods of the Pennsylvania State Department of Agriculture shall be charged with the enforcement of the provisions of this act.

Section 7. All fines and penalties imposed and recovered for the violation of any of the provisions of this act shall be paid to the Secretary of Agriculture or his agent, and, when so collected and paid, shall thereafter be, by the Secretary of Agriculture, paid into the State Treasury for the use of the Commonwealth.

Section 8. This act shall become effective ninety days after its passage.

Section 9. All acts or parts of acts inconsistent herewith are hereby repealed.

This bill has the active support of the Inter-State Milk Producers Association.

(Continued on page 8)

TO STOP LOSS OF MILK

Keep It Cool. Cold Milk Keeps Sweet Five Times as Long as Warm Milk

Milk of ordinary quality held at 75° F., a temperature not uncommon in the summer months, soured in 36 hours, while the same quality of milk held at 55° kept sweet for 80 hours, and at 40° for 120 hours. These results were obtained in an experiment carried on by the Dairy Division, United States Department of Agriculture, to determine the effect of temperature on the milk; and the results explain in a large measure why milk, which has not been cooled on the farm—and kept cold—often is sour when it arrives at its destination.

In one section a survey held during the summer months to determine the temperature at which milk is received at railroad stations for shipment to market, showed the average temperature of morning's milk to be about 60° F., and in some cases it was as high as 80° F. These temperatures specialists say, are much too high to permit milk to be shipped a considerable distance without souring. It was found that some morning's milk was rushed from the farm to the station insufficiently cooled. Milk produced the evening before showed an average temperature of about 5 degrees lower than that of morning's milk and in some instances was as low as 40° F. A large part of the annual loss from sour milk is due to shipping milk at too high a temperature.

Surface Cooler for Quick Results

The best and quickest way to cool milk to 50° F., according to department specialists, is over a surface cooler. Use the coldest water available, and then set the cans of milk in a well-insulated tank filled with water below 40° F. A 10 gallon can of milk precooled with water at 55° F. and set in a tank of ice water at 37° F. was cooled to 50° in 20 minutes.

The use of a surface cooler is especially necessary when the time between milking and shipping is short. If warm milk is run over a surface cooler and then set in a tank of water cooled to 40° F. or below, it should not be difficult to cool milk to 50° within an hour after it leaves the cow. Because precooled with a surface cooler is not practiced and ice is not put into the cooling tank before the milk, much milk reaches the shipping station in summer at so high a temperature that it sours on the way to the city.

Ice Required on Many Farms

Well or spring water that has a temperature of from 50° to 55° F. frequently is warmed up to 70° or 75° F. before it reaches the cooling tank. Under such conditions ice and a longer time are necessary for cooling.

When milk is not precooled and ice is not added to the tank until after the milk is placed in it, with the water supply at 70° F. the time needed to cool 10 gallons of milk to 50° F. is about 2 hours and 25 minutes. The time required to cool milk to 50° F. such methods is too long, especially when morning's milk must be delivered at the railroad station within a short time after milking.

The effect of not putting ice into the cooling tank until after the milk is placed there is strikingly shown by tests. When 10 gallon lots of milk, after being precooled with water at 70°, 60°, 55°, and 50 degrees F. were placed in water at the same respective temperatures and ice was added to the tank, it required 2 hours and 10 minutes, 1 hour and 15 minutes, 43 minutes, and 20 minutes, respectively, to cool the lots to 50° F. The precooled lot of 10 gallon can of milk with a surface cooler, using water at 70° F., saved approximately 11 pounds of ice. With water at 60° F., 16 pounds of ice were saved; with water at 55° F., 19 pounds of ice were saved; and with water at 50° F., 22 pounds of ice were saved.

Keep Milk Cold During Shipment

In order to keep sweet, milk should

be protected at all times from high temperatures. A large percentage of the milk supply for cities is delivered at the railroad station by producers, although some is hauled direct to the city. Even under the best conditions, milk that is transported during hot weather is usually several degrees warmer by the time it reached the railroad station. On the railroad it is held from a few hours to all day, and unless shipped in cars especially equipped to maintain low temperatures there is further rise in temperature. That is the case when milk is shipped in baggage cars or milk cars not provided with ice. To make sure that milk reaches the city consumer in the very best condition it should not only be promptly cooled to 50° F. or below on the farm, but also should be protected during shipment.

To illustrate the importance of protecting milk in transit during hot weather, four 10 gallon cans of milk cooled to 45° F. were hauled a distance of 13 miles from a farm to the railroad station. Can No. 1 was an insulated type; No. 2 was an ordinary can covered with a one-inch felt jacket; No. 3 was covered with a half-inch felt jacket; and No. 4 was an ordinary unprotected can. During the trip, with the air temperatures at 80° F., the milk in the insulated can rose one degree in temperature, the milk in the cans protected with jackets rose six degrees, and the milk in the unprotected can rose 20 degrees. The cans were then shipped by rail in an ordinary baggage car for more than 1,000 miles at an average air temperature of about 80° F. In order to study the effect on the milk, in the unprotected can the milk had reached a temperature of 60° F. in two hours, or after it had traveled about 10 miles from the farm (before reaching the railroad); the milk in the can covered with the half-inch jacket reached 60° F. only after 1½ hours, or about 26 miles of travel; the can covered with the one-inch jacket traveled for 13 hours, or about 332 miles, before reaching 60° F.; and the milk in the insulated can did not reach 60° F. until after 2 hours, or 650 miles of travel. By the use of a half-inch individual can of milk 26 times as far as the ordinary can before the temperature rose to 60° F. The one-inch jacket increased the distance to 33 times and the insulated can to 65 times that of the ordinary can.

Milk sours very rapidly at temperatures above 60° F., and therefore should be kept below that temperature and preferably below 50° F., until used.

NEWS OF THE LOCALS

Since the entrance of the Inter-State Milk Producers Association in the Mifflin county field, the interests of the producers has been taken care of through one county local. Early in February, a new local was organized at Airedale, (Mill Creek) in that county. The officers of the new local are as follows: President, T. H. Metz; vice president, Rufus King; secretary, R. F. Brown; treasurer, Amos Yoder.

A new local was recently formed at Preston, Maryland. A good number of the members of this local had been associated with the Easton, Md., local. Officers to serve for 1921 are as follows: President, W. R. Dulin; vice president, G. K. Kelly; secretary-treasurer, J. A. Fuels.

At a recent meeting of the Chestertown, Md., local, George Hendrickson was elected president and Harry Nichols, Jr., secretary to serve for 1921.

CARE OF FARM IMPLEMENTS SAVES YOUR REPAIR BILLS

SIMPLE RULES TO PREVENT DAMAGE

In this day of complicated machinery most farmers probably give little thought to the care of so simple an implement as a plow. But more effort has been expended in the slow process of developing this seemingly simple tool than in that of any other implement on the farm. It is the basic tillage tool, the fundamental farm implement, and it is richly entitled to be properly cared for when not in use.

Should Be Stored in Dry Place

When laid by, say the implement experts, the plow should, if possible be stored in a dry place, away from contact with the ground. In any case, the bright parts should be coated with grease to prevent rust. Once the mold board and share have become pitted with rust, an efficient job of plowing cannot be done until the corroded parts again have acquired a polish by use.

Harrows, also relatively simple but tremendously important implements, are next to plows, most generally neglected. Many farmers who would not neglect an expensive harvesting machine, are careless as to harrows and other implements of this type. But these, also, represent capital invested and a larger return is possible if they are properly cared for at the end of the season.

If harrows are stored under a shed, the teeth should be supported by blocks or boards, so that they will not become embedded in the ground. All accumulations of earth and trash should be removed. This is especially applicable to wooden-frame harrows. The earthly accumulations retain moisture and accelerate decay. When the wooden parts have dried out sufficiently they should be painted, to prevent season checking and splitting. As the harrow works in wet earth and close to the ground, deterioration is rapid once checking has started.

If the disk harrow is stored in a shed or other floorless building, the disk gangs should be run upon boards so the disks will not become embedded in the ground. Whether housed or not, the implement should be carefully cleaned of all accumulations of soil, and the disks should be greased with a heavy grease to prevent rust. The paint, particularly on the wooden parts, should be renewed frequently.

Get the Mower Under Shelter

Mowers, more generally than plows and harrows, are put under shelter, but many of them spend the winter at the edge of the meadow where the last cutting of hay was made, and in most cases they are not properly greased, even when sheltered. Get the mower under shelter if possible. In any case, clean the knife bar, wipe it with a greasy rag and store in a dry place. Place a block of wood or other support under the mid-point of the tongue, so that it will not acquire a permanent sag. If the mower is stored with the cutter bar in a vertical position, place a block of wood under the shoe to take the weight off the frame. All accumulations of vegetable matter and dirt should be removed and all bearings and other bright parts of the machine oiled or greased. Much the same rules apply to reapers and binders.

The time to care for each implement is when its work is finished. Pressure of other work, however, frequently makes

this inconvenient, but nothing should be allowed to interfere with getting all machinery greased, and, if possible, under cover before the beginning of winter. Then, as early in the winter as you can find time for it, go over every piece and see what repairs are needed. If new parts have to be ordered, order them at once. A great deal of valuable time is lost every spring waiting for repair parts to arrive from the city.

The best possible use should be made of such housing space as is available, and grease and paint should be used without stint. Any farm implement with bearings and bright parts well protected with heavy grease is better off out in the weather than standing in a shed without any protection by grease or oil.

The United States Department of Agriculture has two bulletins—Farmers'



One Way of Keeping Tools—Don't Follow It

Bulletin 946 and Farmers' Bulletin 947—devoted to the repair and adjustment of farm implements. With all implements safely sheltered for the winter, you have time to write for these bulletins and to use the information they contain in putting your implements and machines in the best possible condition for next crop season.

THE WEST GROVE FARMERS INSTITUTE

The first evening meeting of the West Grove Farmers Institute Week was held at the Roslyn Theatre, West Grove, Pa., February 8th. About 300 farmers and townspeople attend.

The speaker of the evening was Miss Myrtle L. Barger, of the Inter-State Dairy Council, identified with its publicity campaign in connection with the greater consumption of milk.

Miss Barger told the story of milk as the producer, distributor and consumer handled it and dwelled particularly on the value of milk as an economical food, growth producer and protector against certain diseases.

The meeting was concluded by the showing of a moving picture, "The Fountain of Youth," which is being shown in many moving picture houses in various sections of the Inter-State Milk Producers territory as a part of the present publicity and advertising campaign.

THE INTER-STATE DAIRY COUNCIL OF PHILADELPHIA

FORMALLY ORGANIZED. WORK OUTLINED

The formal organization of the working forces identified with the Philadelphia Inter-State Dairy Council was made at a meeting held in the offices of Miss Alice A. Johnson, Director of Home Economics, Philadelphia Public Schools, 17th and Pine Streets, Philadelphia, Pa., Wednesday afternoon, February 25, 1921.

The organization has been operating since early in January under the direction of an informal executive committee.

Dr. Clyde L. King of the Wharton School, of the University of Pennsylvania presided and briefly outlined the work of the organization. He said in part "that the aim of the organization was to promote the use of milk through instruction of the public and to take care of the under nourished child. We want to educate the public to use milk. We also want to educate the farmer to produce pure, clean milk. We will have talks before the women's organizations, instruction in

Henry Dolfinger, Dolfinger Dairies, P. E. Sharpless, P. E. Sharpless Co., Ward, Pa.

Henry W. Woolman, Supplee-Wills-Jones Milk Co.

Miss Alice Johnson, director of Home Economics of Philadelphia Public Schools.

Miss Louise Johnson, superintendent of nurses of Philadelphia Public Schools.

Miss Katherine A. Pritchett, supervisor of nutrition State Department of Public Instruction.

Dr. Charles H. Keene, medical director State Department of Public Instruction.

Mrs. H. C. Boden, member of Philadelphia Fair Price Committee.

Paul B. Bennett, specialist of dairy marketing, Bureau of Markets, Trenton, N. J.

Mrs. William E. Lingelbach, member of Philadelphia Board of Education.

Mrs. B. Blair Lucke, eastern district vice-president State Federation of Women.

Thomas Harbison, Harbison's Dairies C. R. Lindback, Abbott's Alderney Dairies.

Harry Scott, Scott-Powell Dairies. A. A. Miller, editor Milk Producers' Review.

E. P. Willis, president Inter-State Milk Producers Association.

H. D. Allenbach, vice-president Inter-State Milk Producers Association.

Frederick Shangle, treasurer Inter-State Milk Producers' Association, Trenton, N. J.

Robert F. Brinton, member of executive committee Inter-State Milk Producers' Association, West Chester, Pa.

A. B. Waddington, member of Inter-State Milk Producers Association, Salem, N. J.

Dr. Clyde L. King was elected chairman, R. W. Balderston, secretary and Henry Dolfinger, treasurer. An executive committee, in direct charge of the program comprising, Dr. Clyde L. King, R. W. Balderston, Henry W. Woolman, Henry Dolfinger, E. P. Willis, and P. E. Sharpless was formally elected.

The next meeting of the Council will be held early in April when a performance of the playlet "The Milk Fairies" will be given in one of the Philadelphia Schools, to which representatives of all organized groups of educational and welfare work will be invited. Plans for special speakers are being made and reports of the work done by the executive committee and field workers will also be presented.

GOVERNMENT ISSUES FARMERS ALMANAC

The United States Department of Agriculture has issued as Farmers Bulletin No. 1202, a complete almanac for 1921.

This new almanac is the result of a large demand for a calendar of work showing the timely use of new farm facts.

Seasonal advice and suggestions are given on such topics as the weather, farm plans, fruit, live stock, poultry, farm operations, marketing, wild life and woods work.

A section on "Farm Helps" discusses farm laws and gives tables and directions for such things as mixing stock feed, fertilizers and spray solutions; weights of seed and grain, and other information needed by farmers and their families.

A limited number of copies is available for distribution and may be had upon application to the Division of Publications, Department of Agriculture, Washington, D. C.

the schools. A playlet, "The Milk Fairies," which has been approved by Dr. George Wheeler, acting superintendent of Schools for Philadelphia, will be staged and acted by the children. In fact, we are going to reach the public by every possible means. Motion pictures, bill boards, newspaper advertising and other methods, yet to be developed, will be used."

"The expense of this work will be borne mainly by the milk producers, dealers and manufacturers of milk products. The farmers have been asked to contribute one cent per 100 pounds of milk produced. The dealers and manufacturers contribute one cent per hundred pounds of milk bought by them."

"With concerted effort through various organizations, through the Granges and other rural organizations we hope to make this movement state and nation wide."

Robert W. Balderston, Secretary of the Inter-State Dairy Council briefly stated the financial and general plan of operation. A moving picture film is now being shown in many moving picture houses. The Milk Fairies Play is now being put on in the schools of Trenton, N. J. where the movement is being actively supported by the Board of Education. The Mechanical Cow, an advertising device, is being used and literature of various classes distributed.

The following general board of directors was named and service accepted:

Dr. Clyde L. King, Wharton School, University of Penna.

Robert W. Balderston, Inter-State Milk Producers Assn.

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Editorial

It is evident that the farmer has had much to contend with during the current reconstruction period, and it is doubtful if the bottom has yet been reached in some lines.

With all the recent reductions in prices the stimulation of a buying movement has not yet made its appearance. A real resumption in buying cannot be established until the public feels that the bottom has been reached and with business stagnant and labor but partially employed, on the whole, anything beyond hand to mouth buying is hardly probable.

The dairy farmer has been taking his bumps, and probably will have to continue for a time and in many cases will have to be endured but there is a danger line and in instances, we are closely approaching that line in some branches of the industry.

It's an open question, under existing conditions, whether lower prices will induce buying, particularly as far as whole milk is concerned, at the same time prices are dependent upon supply and demand and if there is a movement in some districts to force prices to the consumer to a lower level, due to offerings of cheap milk from territories outside our natural milk shed, it is a foregone conclusion, that these prices will have to be met or the market turned over to outside sellers.

The current retail selling price for whole milk for public consumption, or 13 cents a quart in this market, is lower than in any of the other of the principal eastern cities, while the producer receives as much and in some cases a trifle more for his product than do the producers in these other districts. Co-operation among the dealers and producers as well as among themselves has made the factor of distribution in this market a more favorable one than in most other markets. Retail prices have, during and since the war, been lower in this market than in almost any other. The public—that is the consumer, has steadily and is now benefiting by this condition.

The producer has borne the blunt of the price reaction, not only in milk but

in practically all farm products. True, feed prices have been somewhat lower, the winter has been open and there has been a minimum amount of labor necessary for farm work, but there have been other losses that must be considered.

The general inventory of the farmer's herd, if taken today, would show a sharp loss compared to purchasing prices a year ago—while much of the equipment required for farm operations show little, if any reduction from last year's prices.

It must be borne in mind that a reduction in prices below a certain level will react on production. A decrease in the yield, be it from acreage planted or milk produced, cannot be recovered in a season or a year. It takes a year to recover from a decrease in acreage planted and several years to build up a milk herd.

It would therefore be wise to move slowly. Both the consumer and the producer should consider the situation carefully. Consumers should not force prices to a level on which the producer cannot exist nor should the producer take radical steps which would reduce production to a point that will not enable him to meet the demand when it comes.

Move slowly and conservatively, watch conditions closely, co-operate, one with the other and thus obtain a clearer insight into the ways and means of keeping the wheels of progress moving during these perilous reconstruction periods.

MILK SUBSTITUTES

It would surprise many of our readers to know just how extensive the sales of substitutes for milk, or compounds of skimmed milk and vegetable fats, have been. Such compounds when used as substitutes for condensed products, containing the whole milk fats, lack the growth and health producing elements (vitamines) contained in the milk fats and not contained in vegetable oils, such as coconut oil, used largely in their manufacture.

House Bill No. 497, printed in full on page 2 of this issue has been introduced with the view of prohibiting the manufacture or sale of such filled products in Pennsylvania.

Actively supporting this bill, in addition to the Pennsylvania Dairy Council, are the Inter-State Milk Producers Association, The Dairyman's Co-operative Sales Company, The Dairyman's League, Pennsylvania State Grange, Pennsylvania Ice Cream Makers' Association, Philadelphia Milk Exchange, The Pittsburgh Milk Dealers' Association and the Philadelphia Inter-State Dairy Council.

The Legislative Committee of the State Federation of Labor is in favor of the bill; various officials in the State Department of Agriculture, the State Department of Education and the State Department of Health have had placed before them the facts relating to this question and are unqualified in approving the proposed legislation.

Urge your legislators to support the measure on the floor.

LEGISLATIVE MATTERS

It should be the particular purpose of each and every member of the Inter-State Milk Producers Association to take action on the bills before the legislatures in their respective states. The officers of your association have received these bills—given them full consideration, and in another column have recommended your action.

The bill to prohibit the sale of filled skimmed milk—the so-called condensed

milk substitutes in Pennsylvania, should have your immediate support. This is House Bill No. 497. Write your legislators to support this bill. Do it at once. We must have the full support of our members if this bill is to pass.

The proposed daylight saving bills should be defeated. Chambers of Commerce, official bodies of various cities, organizations of various characters in the cities and towns are urging the passage of these bills. As we have stated in a previous issue, unless some determined effort is made, these bills will be passed and the farmers have forced upon them war time conditions, with all the attending inconveniences. Your organization has gone on record as being opposed to these bills and urges you to take sharp and immediate action to advise your legislators to oppose and defeat these bills.

BALTIMORE MILK SITUATION

The market condition here was such that it was necessary to drop the price of milk for March four cents per gallon, this reduction to be passed on to the consumer.

This drop in price was a month earlier than we expected, but owing to the weather conditions, which have been favorable for milk production, it was decided to drop the price now, hoping in this way to increase the sales, in order to absorb all the milk being offered.

We have made arrangements with the principals of the schools to have milk delivered to the schools, so each pupil can have a glass of milk twice a day. This has met with such a success that the school board has expressed a desire to have every school in the city supplied with milk daily.

Our educational campaign is well under way, and with the help of various agencies, newspaper publicity, lectures, demonstrations, etc., the people of Baltimore are being educated to the value of milk as a food.

The consumer of Baltimore pays fourteen cents, (14c) per quart and eight cents, (8c) per pint, while the producer receives thirty cents, (30c) per gallon for 4% milk and twenty cents, (20c) per gallon for milk in excess of what was averaged last fall.

D. G. Harry,

President Maryland State Dairy-men's Association.

DIRECTORS MEETING

The directors of the Inter-State Milk Producers Association were called in meeting on February 9th to consider important matters of policy. With one exception the membership of the board was in attendance. Two were represented by proxy. In accordance with a resolution passed at the annual meeting plans were made to increase the board from 18 to 21 members. Prospective directors from York and Adams counties were present. J. A. Poorbaugh represented the former and W. H. Stock, the latter county. The additional directors will be elected at the next meeting of the board.

A complete financial statement in connection with the publication of the Milk Producers Review, since it was started in May, 1920, was presented and received with general approval. The Review began as an eight page proposition and is now firmly established on a 16 page basis, with prospects of further expansion in size.

The work of the Inter-State Dairy Council in connection with the educa-

tional campaign looking toward the greater consumption of milk was reviewed at length.

Considerable study was given the basic condition of the milk market, particularly in relation to the condensed milk situation and its effect on the general whole milk market.

FEBRUARY ACTIVITIES

The executive and field forces of the Inter-State Milk Producers Association have been actively engaged during the past month.

Early in February there was a meeting of the board of directors to consider various projects of policy. Two formal meetings of the executive committee have been held at which matters requiring immediate attention were taken up.

A considerable share of your officers' time has been taken up with legislative matters, both National and State, details of which are given in another column.

In the field aggressive work has been done in helping in the formation of new locals and in the reorganization of such as were inclined to be weak or inefficient. Some twenty meetings have been attended during February by your various officers and field men. Several new locals have been organized.

A number of changes of dairies have been effected during the month. Considerable difficulty has been found in placing dairies unless of high grade. The total number of dairies placed with new buyers during February was 56, while 8 conferences in the field and 14 at your association headquarters, involving various difficulties, have been held and such matters usually adjusted satisfactorily.

Two hundred and six new members were added to the membership roll during the month, probably the most noteworthy single member enrolled being the Hon. William C. Sprout, Governor of the State of Pennsylvania, with 40 cows on his Lapidea Farms in Delaware county.

Hopewell, N. J., Local

A meeting of the Hopewell local was held at Hopewell, N. J., on February 11th, incident to the transfer of the Receiving Station, at that point, from Peter Heanig, Philadelphia, Pa., to the Castana Dairy, Trenton N. J.

Upwards of a hundred members were in attendance. President, E. L. Van Zandt called the meeting to order and introduced Benjamin Woodward of the Castana Dairy, who made an interesting address, outlining the policies of the Company in connection with its newly acquired plant. That it would be the policy of the company to take all the members milk and pay established market prices. As far as the surplus plan is concerned the basis established at this plant, during October, November and December will be accepted, as the basic standard for 1921.

Committees were appointed to work out details in connection with cartage, use of cans and etc.

Wm. H. Hamilton, president of the Harborton, N. J. local, County agent Wm. Barnhardt for Mercer County, N. J. and Frederick Shangle, treasurer of the Inter-State Milk Producers Assn., made interesting addresses on timely topics.

Hopewell Local has always been quite active in its organization work and promises to be even more so in the future. Fourteen new members were signed up at this meeting.

As Per Usual

Lawyer—"So you want a divorce from your wife? Aren't your relations pleasant?"

Client—"Mine are, but hers are the most unpleasant lot I ever met."

LATEST MARKET PRICES

February Milk Prices

The Basic and Surplus Plan of Purchasing milk in the Philadelphia territory again became effective with January. Under this plan the average quantity of milk shipped during October, November and December, 1920, is taken as the "basic quantity" and is paid for at the basic price named. All milk in excess of the basic quantity will be paid for on the basis of 92 score solid packed creamery butter New York City, plus 20 per cent.

Producers changing from one buyer to another after January 1st, are considered as having forfeited their basic standard and when taken on by other buyers are rated at a 50 per cent. basic and 50 per cent. surplus basis.

Prices subject to change whenever warranted by market conditions.

From these prices one cent per 46 quarts (or one cent per 100 pounds) is to be deducted by the buyer, which together with one cent per 46 quarts, contributed by the buyer, is to be turned over to the treasurer of the Inter-State Dairy Council for the purpose of carrying on a publicity campaign, advertising the food value and greater consumption of dairy products. The usual commission from the members of the Inter-State Milk Producers Association is to be deducted and returned to the Association as heretofore.

Price for all milk above the basic quantity.

RECEIVING STATION PRICES
Less Freight and Receiving Station Charges
From this date quotations will include a deduction of one cent per 100 pounds which amount, together with one cent per 100 pounds, contributed by the buyer, is to be turned over to the treasurer of the Inter-State Dairy Council for the purpose of conducting a publicity campaign, advertising the food value and greater consumption of dairy products. The usual commission from the members of the Inter-State Milk Producers Association is to be deducted and returned to the Association as heretofore.

Less Freight and Receiving Station Charges

Basic Price per 100 lbs. Price per 100 lbs. surplus milk at all receiving points

Miles	Basic Price	Surplus Price
1	\$2.77	\$1.84
11	2.75	1.92
21	2.73	1.92
31	2.72	1.96
41	2.70	2.00
51	2.68	2.04
61	2.67	2.08
71	2.66	2.12
81	2.64	2.16
91	2.63	2.20
101	2.62	2.24
111	2.61	2.28
121	2.60	2.32
131	2.58	2.36
141	2.57	2.40
151	2.56	2.44
161	2.55	2.48
171	2.54	2.52
181	2.53	2.56
191	2.52	2.60
201	2.51	2.64
211	2.50	2.68
221	2.49	2.72
231	2.48	2.76
241	2.47	2.80
251	2.46	2.84
261	2.45	2.88
271	2.44	2.92
281	2.43	2.96
291	2.42	3.00

Freight rates deducted on a basis of 46 quarts, 113 per cent. of 40 quarts, plus 3 per cent. war tax. Four-tenths of a cent added or deducted for each tenth of one per cent. butterfat above or below 3 per cent.

Subject to the same general conditions as apply to January prices and subject to change whenever warranted by market conditions.

F. O. B. Philadelphia

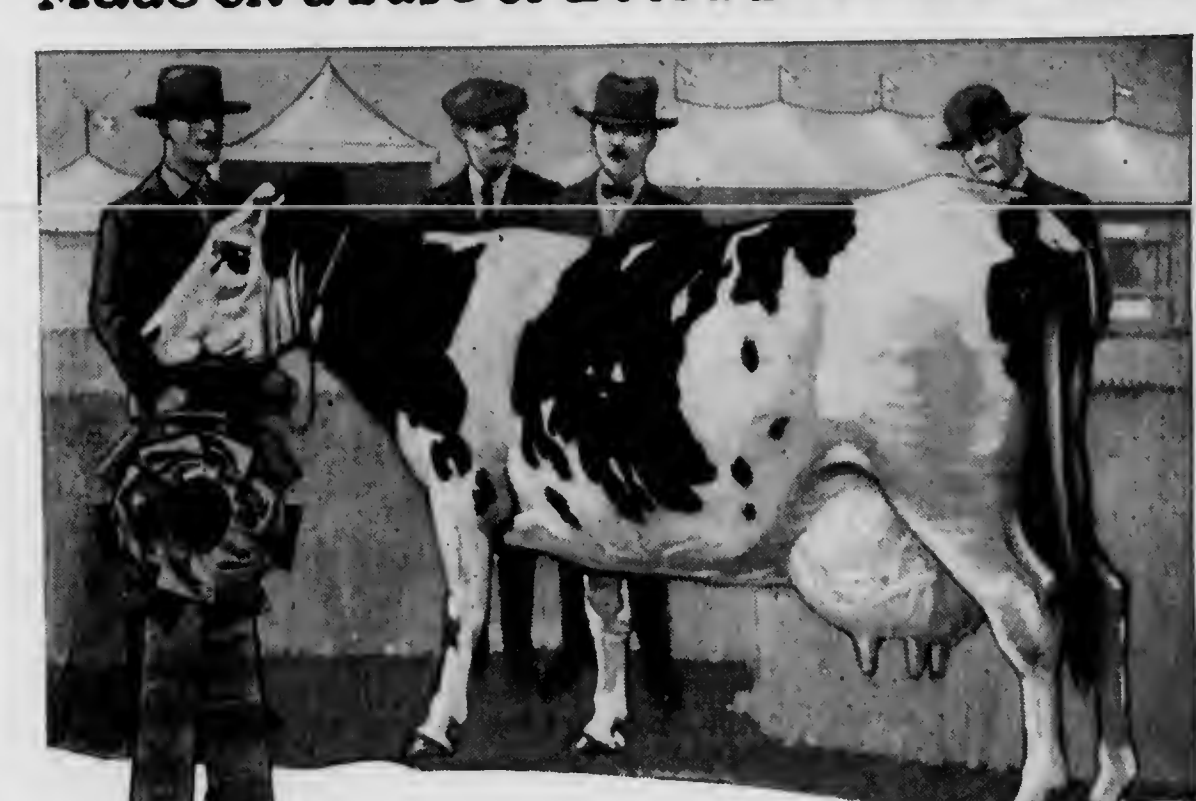
Basic Price per 100 lbs. Price per 100 lbs. surplus milk at all receiving points

Miles	Basic Price	Surplus Price
1	\$3.28	\$1.71
11	3.26	1.79
21	3.24	1.87
31	3.22	1.95
41	3.20	2.03
51	3.18	2.11
61	3.16	2.19
71	3.14	2.27
81	3.12	2.35
91	3.10	2.43
101	3.08	2.51
111	3.06	2.59
121	3.04	2.67
131	3.02	2.75
141	3.00	2.83
151	2.98	2.91
161	2.96	2.99
171	2.94	3.07
181	2.92	3.15
191	2.90	3.23
201	2.88	3.31
211	2.86	3.39
221	2.84	3.47
231	2.82	3.55
241	2.80	3.63
251	2.78	3.71
261	2.76	3.79
271	2.74	3.87
281	2.72	3.95
291	2.70	4.03

When milk is not tested the price f. o. b. Philadelphia is 8 cents per quart

BULL BRAND DAIRY-RATION

Made on a base of Dried Brewers Grain



Dinola Pauline
Colthilde--No. 205642

Owned by Dr. L. H. Benson, Wassiac, N. Y., 33.9 pounds of butter from 688.2 pounds of milk in seven days. 136.58 pounds of butter from 2900.1 pounds of milk in 30 days. 103.3 pounds of milk in one day. 701.3 pounds of milk in seven consecutive days.

BULL Brand Dairy Ration helped Dinola Pauline Colthilde make these records. It is a scientific mixture of milk producing feeding stuffs build on a base of Dried Brewers' Grains—a sure milk producer. It will absorb large quantities of water making it like spring grass, a moist, succulent feed that turns to milk.

Bull Brand Dairy Rations is scientifically mixed from ingredients of known and proven value. Just the right amount of protein, fat and carbohydrates with the least possible fibre make it a big producing balanced ration.

Bull Brand Dairy Ration costs less to Feed

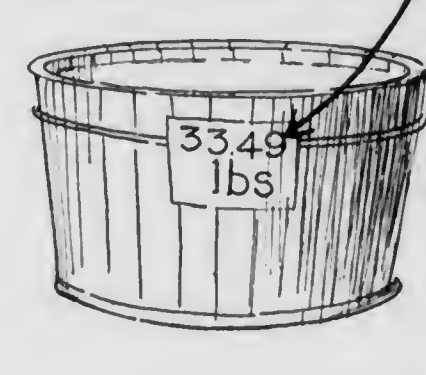
Example

In any number of cases, farmers who have "mixed their own" or tried cheaper feeds are daily averaging two quarts of milk more per cow since feeding Bull Brand Dairy Ration. If these farmers feed a cow 6 pounds of concentrates a day a ton will give them about 330 gallons. This average of two quarts more of milk per ration means 330 quarts, worth \$49.50 per ton of feed. If Bull Brand Dairy Ration cost them \$9.50 more per ton than some feeds they might buy or mix they are \$40.00 to the good on every ton they feed.

ASK YOUR DEALER FOR OTHER BULL BRAND FEEDS FOR LIVESTOCK AND POULTRY

Maritime Milling Co., Inc. Buffalo, N. Y.

JANUARY											
1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24
25	26	27	28	29	30	31					



Analysis and Ingredients of Bull Brand Dairy Ration

Analysis:
Protein not under 24%;
Fat 6%; Fibre not under 12%.

Ingredients:
Dried brewers' grain, dried malt grains, old process oil meal, cotton seed meal, corn gluten feed, coconut meal, wheat middlings, ground oats and salt (3/4 of 1%).

If your dealer cannot supply you with BULL BRAND DAIRY RATION write us. Our guarantee protects you.

Giants in Strength

Craine 3-wall Silos

are as strong as they are handsome. And give ideal silage protection because of the triple-wall construction. Inner wall is closely fitted upright staves—an ordinary silo in itself. Your old stave silo can be used for this wall, saving expense. Second wall is heavy Silafelt, to keep out rain, frost and air, safeguarding the silage. Third wall is Crainelox spiral covering, winding up to the top. Protects and reinforces every inch of wall. No unsightly hoops or lugs to adjust and worry about.

The Craine Silo is a permanent building that pays rich interest every year on the investment. The strongest and handsomest silo made—and we can prove it. Write today for literature, free, and for agency terms.

CRAINE SILO CO.

Box 230 Norwich, N. Y.

Rebuild the Old STAVE SILO
Any homemade or stave silo, if twisted, tipped or collapsed can be rebuilt into a beautiful, new Craine 3-wall Silo at about 1/2 the price of a new one. All the old material (except hoops) can be used. We buy the hoops. Send for our plan of rebuilding old silos.

Hoffman's Seed Oats

SIX VARIETIES—unstained—sound—S heavy, weigh 42 to 46 lbs. per measured bushel—unclipped. Grains here shown are "Climax," "tree" or "spangle" type. Heavy yielder. An early oats, rust resistant—does not lodge—thin hull—plump grain inside—full bushel weighs 46 lbs.—A dependable kind to sow.

Other kinds offered include "Bumper Crop"—"Swedish Select"—"Silvermine"—"Peerless"—and "Improved White Russian." The last-named is a true "side" or "horseman" type of great merit—very prolific—plump—thin-hulled—heavy kernels. The finest side oats. Write for free oats samples.

Northwest brand Clover—Alfalfa—Alake and Timothy. Very best seed that grows, regardless of cost. Produced in short, cold seasons of the north. Cleaned to perfection. New seed of strongest vitality. If you believe in the best seed, sow Northwest brand—results are sure. Samples free.

Seed Corn—For your crib or silo. Nine distinct types. Grown in Lancaster County, Pennsylvania. Soundest germination.

Write today for Seed Book and Samples

Both are free for the asking. Mention this paper.

A. H. HOFFMAN, INC., Landisville, Lancaster Co., Pa.

Choice qualities of Canada Peas—Soy Beans—Cow Peas—all Spring Grains and Grasses—Maine Seed Potatoes, and all other farm seeds.

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When Writing to Advertisers**

DANISH CO-OPERATIVES

By R. W. Balderston

The Danish Co-operative Creameries have been held up to us as an example by every speaker or writer who has appealed to our farmers to give up some of their long guarded independence and through united effort to achieve group independence.

The Danish Co-operative Creameries are but one of the great organizations through which Danish farmers co-operate with each other.

I had heard so much about the success of these co-operatives that I wanted to know how they did it and gave the subject considerable attention while in that country. I was especially interested in their extension organization, which might be compared to the County Farm Bureau.

This co-operative is financed by the Danish farmers themselves, along lines similar to the present membership movement in the United States. Their county organizations employ the consultants (or advisers) of which, in some cases there are two, a dairy specialist and a crop specialist. The co-operative creameries, the cow testing associations, the bull associations and the breeding associations all contribute to the expense and expect to have the services of the dairy adviser, while the other local organizations, such as the co-operative banks, the feed buying and fertilizer associations, seed growing associations, drainage clubs, marl clubs, etc., naturally see more of the general adviser.

The same group of farmers are members of many different or all of these organizations, but they keep each separate in function and authority.

The Farm Bureau, as such, is the energizing and vitalizing force, which encourages the active functioning of all the definite organizations and guides them in adopting sound and progressive policies.

I watched a group of farmers buy a bull for a breeding association. In making their decision they depended upon the expert knowledge of production records and blood lines on which the consultant was informed. Then I saw the same adviser pick out cows for the show; stop in to help a creamery manager install an improved system of bookkeeping and advise some of the farmers in their purchases of winter feed.

The two dairy breeds of Denmark, the Danish Red and the Black and White, both have strong organizations behind them. They lay great stress on production records, even going so far as to make the possession of an advanced registry record a necessary qualification for the admission of an animal to any show. These records are secured through the cow testing association and not by maintaining an expensive duplicate service. In turn, bull clubs buy only young bulls from dams with approved records.

By these means the dairy organizations are dove-tailed together, the Farm Bureau, the breeding societies, cow testing associations, the bull clubs and the county fairs, all being, in a measure, interlocking.

The Farm Bureaus are very useful in organizing co-operative drainage projects. It is essential that a large part of the soil in the agricultural districts be systematically tiled, but there is so little elevation, as a rule, that drainage mains frequently run for miles to a stream. The expense of construction and

maintenance of such mains are taken care of by co-operative associations.

Co-operative associations are also formed for the operation of marl pits, of which there are extensive deposits at various points on the islands. In order to get this marl on the land, thousands of feet, frequently miles, of temporary narrow gauge railroad track must be laid. The marl is then hauled in small cars, by horse power, directly across the country to the fields on which it is to be used.

All milk brought to the butter and cheese factories is hauled co-operatively in large wagons, even when the farmers live only two or three miles away. Farmers do not feel that they can spare the time to go to the factory with their individual milk. Many of our farmers do not stop to calculate how much time of a man and horse is consumed when this service is performed individually.

Just now we are hearing much about co-operative effort and organization of American farmers. Men differ widely as to methods and policies, but all seem to agree that economic independence cannot otherwise be assured.



Technical School Supt. and Consultant, Copenhagen

A number of significant facts stand out in my mind, as a result of visiting Denmark, for the purposes of studying the history and present status of the co-operative movement among the dairymen of that country.

1. Group activities in the Danish village community, in the past, furnished a background for the present movement.
2. Economic necessity forced group action, at the time, when the co-operative movement first became wide spread.
3. A sound rural educational system has been developed parallel to the co-operative movement, training the youth in technical branches to fit them for various lines of activity required by cow testing associations, breeding clubs, butter and cheese factories, slaughter houses, etc., and giving them the background necessary to make them good co-operators; a passion for service and a fondness for country life and a knowledge of how to enjoy it.

4. Every co-operative organization was formed to fill certain definite needs, usually only one and it seldom branched out into other lines.

5. An effective inter-relationship and understanding between the various communities and community organizations for mutual help and for the advancement of agriculture.

If I might sum up the lesson of a short but highly instructive study, it might be included in two sentences:

The Danish Farmers living in a small country with relatively simple problems, have been drawn by environment and training (other things being equal) to work out their problems co-operatively. They have thereby set a standard and worked out a system that our own farmers can apply to our situation here, if we have the proper attitude of mind and learn by their experience, even if our problems are relatively much greater and many times more complex.

LEGISLATION

Interesting to Dairymen

With National Congress in session, battling with tariff and other national affairs, State legislators in Pennsylvania, New Jersey and Delaware in session, the customary crop of bills of more or less interest to the dairy farmer have come out.

The Inter-State Milk Producers Association through its officers has been actively engaged and has had a part in framing some of the bills of particular interest to its members.

Through its affiliation with the National Federation, it has participated in the hearings in connection with the emergency tariff or Fordney Bill, asking for import duties on milk and milk products, butter, etc., and on oriental oils, such as enter into the manufacture of oleomargarine and filled skimmed milk. The Fordney Bill has passed the House and Senate, with many changes in the latter branch of Congress. As revised it included a duty of 35 cents on wheat, 2 cents a pound on sugar and 6 cents a pound on butter and substitutes. Cheese and substitutes, 23% ad-valorem, milk fresh 2 cents per gallon, cream 5 cents per gallon, condensed or sterilized milk 2 cents per pound.

President Wilson vetoed the bill and Congress in its closing hours was not able to muster enough votes to pass the bill over the veto.

In the Pennsylvania Legislature, a bill No. 497, has been introduced for the purpose of protecting the public health relating to milk, cream, skimmed milk, condensed, evaporated or concentrated milk, powdered milk, dried milk and dehydrated milk, ice cream and their fluid derivatives, prohibiting the introduction of foreign fats into them, regulating the sale of and defining condensed, concentrated and evaporated milk and stipulating for infraction thereof and providing for its enforcement.

This bill is referred to at length in another column and should have the support of every member.

Urge your legislators to vote for this bill.

Delight saving bills have also been introduced in the Pennsylvania Legislature. One of these, Senate Bill No. 72, provides for the advancement of standard time one hour on the second Sunday of April each year and retarded one hour on the second Sunday in September. This is a pure daylight saving law and does not have the approval of the board of directors of the Inter-State Milk Producers Association. It should be defeated.

House Bill No. 81 provides for an amendment to the present act defining standard time, so that by any act of Congress or the General Assembly of the Commonwealth of Pennsylvania, the time so fixed shall become the standard time of this Commonwealth for such portion of the year. And further provides that any city, borough, or township may by ordinance, advance the standard time in such municipality for any portion of the year and the time so fixed shall be the standard time of such municipality for such portion of the year.

The possibilities of even more complex conditions than prevailed under the National daylight saving act or the more recent hodge podge time standards in various states and cities is obvious.

The executive committee of the Inter-State Milk Producers Association urges its members to use every effort to defeat this bill.

15% Reduction

On all our Implements except Mowers

Tillage Implements

Moldboard Plows
Disc Harrows
Tractor Harrows
Weeders
Stub and Vine Cutters

Planters and Seeders

Corn Planters
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Peanut Planters
Potato Planters
Combination and Special Drills for All Vegetable Seeds

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Mowers
Rakes
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Walking Cultivators
Single Row Riding Cultivators
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Hand Garden Cultivators
Riding Hoes
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Special Drill Fertilizer Sowers for All Crops

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Blower Ensilage Cutters
Corn Huskers
Corn Shellers
Hay, Straw and Stalk Cutters

General Tools

Tobacco Presses
Cider Presses
Fanning Mills
Garden Barrows

ALTHOUGH not justified by present and prospective costs, which continue high, we have determined to do our utmost to stabilize business conditions as they affect the farmer. With this purpose in mind, we make this unprecedented offer on all of our lines.

This offer is made for immediate acceptance and subject to prior sale of goods now on hand or in process of manufacture. Any delay in placing your order with your dealer may prevent him from making delivery. Discouraged by recent market conditions, he has not provided sufficiently for your coming needs. It may take him some time to do so, and further delay on his part may prevent you from buying at these low prices.

Go to your dealer today and place your order at this tremendous reduction. The implements made by Bateman and Companies, Inc., are standard values. They have planted the crops and tilled the fields of American farmers for generations. To buy them at these prices is to reduce your cost of farming. Do not be without them this Spring. Act now.

Bateman and Companies, Inc., 347 Madison Ave., New York Dept. M



IRON AGE

In the Delaware Legislature a bill has been introduced similar to the Pennsylvania act, providing for the protection of public health and the prevention of fraud and deception by regulating the weighing, testing, buying and selling of milk and cream; providing for the examination and appointment of certified testers and the issuing of licenses and making of tests, etc.

This bill has the support of the Inter-State Milk Producers Association and its members in Delaware should urge its passage.

In the Legislature of New Jersey, Senate Bill No. 101 has been introduced as a supplement to its Pure Food Act. It provides for the definition of ice cream, and specifies that it shall not contain less than 8 per cent. of milk fats except when it contains fruit, nuts, or eggs, when not less than 6 per cent. of milk fat is the standard. It provides that no ice cream, ice cream mixtures or compounds may be manufactured or sold which are adulterated or misbranded within the meaning of the act. The bill is similar to the present act in

the State of Pennsylvania and has the support of the Inter-State Milk Producers association in its present form.

"Tea is bad
Coffee is worse
Drink milk
Safety first."

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WRITING TO ADVERTISERS**

EMPIRE

"The Competent Milker"

Is made even more competent, more sanitary and more efficient with the perfection of the

New Type "O" Pulsator

We should be pleased to call at your farm or mail you descriptive literature on request. This will not obligate you in the least.

"ASK THE DAIRYMAN WHO HAS ONE"

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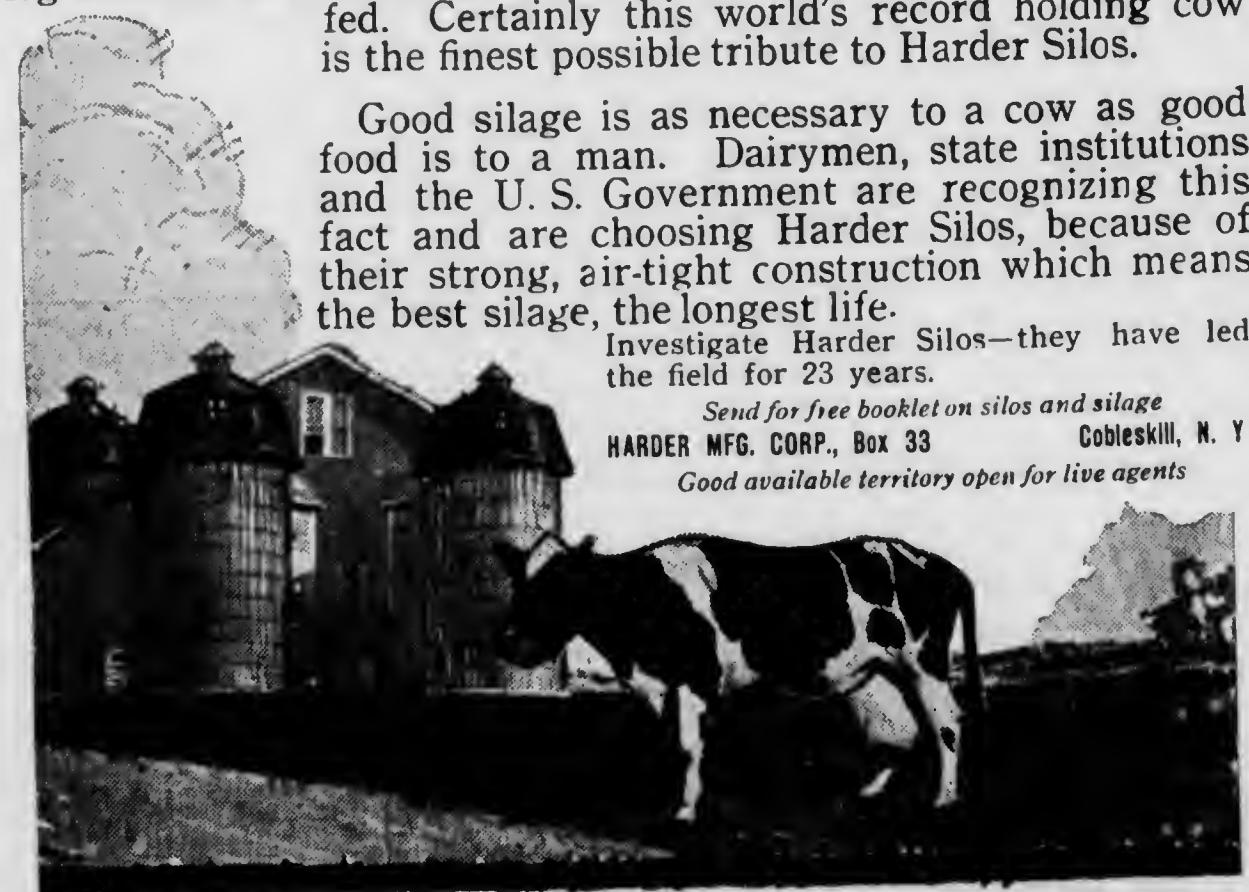
West Chester, Pa.



HARDER SILOS

Ernestine Glisna is a tribute to Harder Silos

This is Ernestine Glisna, the most famous cow in the world. Back of her are the three Harder Silos of the State School of Agriculture at Cornell University. From these she is regularly fed. Certainly this world's record holding cow is the finest possible tribute to Harder Silos.



Good silage is as necessary to a cow as good food is to a man. Dairymen, state institutions and the U. S. Government are recognizing this fact and are choosing Harder Silos, because of their strong, air-tight construction which means the best silage, the longest life.

Investigate Harder Silos—they have led the field for 23 years.

Send for free booklet on silos and silage
HARDER MFG. CORP., Box 33
Good available territory open for live agents

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THE NAME TO GO BY—WHEN YOU GO TO BUY
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Write for Color Cards and Booklet "Paint Pointers"

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An Easy Way to Remove Afterbirth

If you want your cows to be healthy and productive, by all means see that the afterbirth comes out in a natural way, for the infection will injure the animal's health if you don't.

The best way to get rid of a retained afterbirth is to let B-K promptly reduce inflammation, suppress infection, destroy foul odors, soothe and heal torn tissues and permit the afterbirth to come away without assistance.

If treatment is given promptly, the case will respond at once. If delayed, infection advanced, foul odors present, etc., then the first two or three applications should be stronger.

Your cow will not be injured or torn in any way, as she will be if you try to remove this afterbirth by the unnatural hand method. B-K prevents infection and leaves no part to decay. We have sold B-K to hundreds of customers for many years. Their success with it increases our desire to see every farmer use it. We have observed the great help it is to the man who milks cows. Write us today to ship you a gallon.

General Laboratories, Madison, Wis.
Sole Mfgs. B-K



5 Great Novelties 20 Cts.

AUTUMN GLORY. A new hardy plant. The most showy Autumn bloomer, surpassing all others. It is the latest to bloom, showing its full glory after frost has killed all tender flowers. Greatest novelty in twenty years. Succeeds everywhere, reaching perfection the first season from seed, and continues blooming for years. 20 cts. per pkt. With each order we send one trial packet each of:

PINK WOOL FLOWERS. new—nothing can surpass the mass of pink flowers which it shows all season. Blooms in 3 to 4 months.

DAHLIA LORD GIFF. Blue pink, in great profusion. **JAPAN IRIS.** new hybrids of all colors. Magnificent. **DIENER TOMATO.** grows to weigh 3 lbs. As smooth and beautiful as an apple. Most striking new Vegetable. **And our Big Catalog, all for 20 cts.**

Big Catalog, free. All flower and vegetable seeds, bulbs, plants and new berries. We grow the finest Gladioli, Cannas, Irises, Peonies, Perennials, Shrubs, Vines, etc. All prize strains—many striking novelties. JOHN LEWIS CHILDS, Inc. Floral Park, N.Y.

A dairy cow's body is more than half water. It is evident that in order to produce a large amount of milk she must have an ample supply of pure drinking water. It should not be ice cold during the winter time, since it will require feed to warm the water and dairy feeds are expensive fuel substances.—State College.

MILK SUBSTITUTES

(Continued on page 2)

The Dairymen's Co-operative Sales Co., The Pennsylvania Ice Cream Makers Association, The Pennsylvania State Grange, various officials of the departments of health, education and agriculture of the State of Pennsylvania and other organized bodies.

If the health and growth of our infants and children are not to be impaired, if the poor and needy are not to be imposed upon, a bill such as that introduced must become a law.

It is up to every member of the Inter-State Milk Producers Association to support this bill. Urge your representatives in the House and Senate of Pennsylvania to support this measure. DO IT NOW.

CHESTER COUNTY FARM BUREAU EXECUTIVE MEETING

At the regular monthly meeting of the Chester County Farm Bureau Executive Committee, last month, there were present: Charles J. Garrett, West Chester; Roland Smedley, West Chester; Harry B. Shenk, Elverson; J. C. Ottenkirk, Honeybrook; Joseph Phipps, Uwehland; Furman Gyger, Kimberton; William E. Pitt, New London; Malcolm Farquhar, Kennett Square; Philip Price, West Chester; Isaac A. Passmore, West Chester; Dale Andrews, West Chester; Clyde Saylor, West Chester.

Treasurer reported that the county commissioners had turned over to him one-half of the yearly appropriation and he was instructed to acknowledge receipt of the appropriation and express the thanks and appreciation of the Executive committee to the commissioners.

The committee discussed the plan of putting the farm bureau of Chester county on a paid membership basis, and arrangements were made to hold a special meeting some time in May at which time the Farm Bureau Executive Committee would recommend to the farmers of Chester county, that they adopt a paid membership basis for the Farm Bureau. The committee goes on record recommending that the membership fee be \$5.00. The committee feels that it is time for the farmers of the county to invest some of their money in the work if they feel that it is going to develop more rapidly.

The question of daylight saving was discussed and the committee is unanimously opposed to the plan.

POTATO SPRAYING

The spraying demonstrations in Pennsylvania, gave a state-wide gain of 74.7 bu. per acre. There were 318 demonstrations in 42 counties.

The spraying demonstrations in Pa. 74.7 bu. gave an increase of 462,718 bus. Chester County had one spraying demonstration on the farm of Henry Young, Downingtown, that gave an increase of 60.5 bu. or his 7 acres an increase of 423.5 bus., almost enough to pay for the spraying and the first cost of the sprayer.

The fact that the past year was an "off year" for potato prices does not in the least affect the triumph that spraying has achieved. On the contrary an exception proves the rule. Compare the costs against the increased yield. The whole spraying program cost \$78,662.06 whereas figuring the increase of 462,718 bushels at a selling price of 75c per bushel it would amount to \$347,038.50, which means that the farmer has just that much more money in his pocket. Furthermore, the farmer that sprayed persistently escaped the rot damages that afflicted the states when the tubers were harvested.

A PHENOMENAL DAIRY COW

By Newton S. Gotshall

Since the introduction of official advanced registry testing or testing for the Registry of Merit, as the case may be, breeders of pure breeds and others engaged in milk production have been deeply interested in the "race" of high production, not only in individual within the breed, but also in the individuals of the several dairy breeds. Such testing has resulted in the making of large records which have materially increased the value of the cow making such record, besides greatly increasing the value of the offspring and near relatives in her family.

It has been exceedingly interesting to keep tabs on the several breeds to see which would produce the next world's record cow. Records are steadily increasing in number, and we now have official records of production, which to the milk producer, who is still struggling along with "scrubs", seems next to impossible. Even breeders of high grade and pure bred stock marvel at some of the records made by two and three year olds, which they expect to steadily improve until they reach the mature class, generally represented to be about that of six years.

There are many cows who make high records at 9 to 11 years old, and a few at twelve years of age, but beyond that period we generally do not expect much and may not have a right to expect much after ten or twelve years of faithful and profitable performance. When cows, which have proven exceptionally profitable while in their prime, pass in the aged class, we usually find them at the far end of the cow stable, living mostly on roughage and being kept solely for the production of offspring.

Would it not be just as interesting to have a cow make a high record at an advanced age as at an exceptionally early age, like junior two year old?

Speaking of cows with exceptional records at an unusually advanced age, we find that it is not necessary to go outside of the Inter-State Milk Producers Association territory to find what is probably the most phenomenal cow of all breeds, insofar as making records at a time of life when most cows have ceased to chew the cud and having left only a pleasant or unpleasant memory for their owners, as the case may be.

Financial King's Interest 235065 the subject of the illustration on page one of this issue is a cow with a remarkable record. This phenomenal cow is a pure bred Jersey owned by the Greystone Jersey Farm, West Chester, Pa., and is the only living daughter of Financial King, the foundation sire of the Financial King family, which is noted for its high milk and butter producers. Speaking in breeders language she is of a "Royal Family."

At the age of 17 years this cow was tested for the Registry of Merit, when she produced 401.0 pounds of butterfat or 471.6 of 85% butter. Her usefulness as a high producer did not end with the completion of this record, as was shown by her performance two years later.

The first month after freshening as a 19-year-old, Financial King's Interest produced 54.37 lbs. of fat or 63.9 lbs. of 85% butter and kept right on at this pace. As a twenty-year-old she made a record of 400.96 lbs. fat or 471.2 lbs. 85% butter. Her milk production for that year was 7302.2 pounds, with an average butterfat test of 5.49% for the year. That this cow is vigorous to a pronounced degree is proven by the fact

The same factors which have made the De Laval Separator famous are back of the DE LAVAL MILKER

Just as the De Laval Cream Separator established new and higher standards of efficiency and construction, so is the De Laval Milker establishing higher standards among milkers. It is strong; durable; simple in construction and operation; easy to keep clean; saves time, and increases production.

The same policies which have made the De Laval Cream Separator the most popular and most widely used in the world are back of the De Laval Milker and are responsible for its rapidly increasing use.

Long ago the De Laval Company recognized the need for a mechanical means of milking, to place the dairy business on a machine basis. For over twenty years experiments have been conducted, and after many years of research, test and use, and not until the De Laval Company was absolutely sure its milker was actually a better way of milking, was it offered for sale. Now after four years of commercial use, in all sections of the country, owners are proving that it not only saves time and eliminates the drudgery of milking, but it actually increases the flow of milk even over good hand milking.

Service also helped make the De Laval Separator famous; and it is service back of the De Laval Milker that is helping.

To create preference for it among dairymen. This means that the De Laval Milker will be properly installed, that you will be thoroughly instructed in its care and operation, and that the De Laval Company's interest in you, instead of ending there, just begins.

The De Laval Separator has rendered a service of inestimable value to the dairy industry—the De Laval Milker is doing the same. It removes the one great drawback to dairying—hand milking. American farmers realize the service, stability and integrity back of the name "De Laval," all of which is reflected in the rapidly increasing use of De Laval Milkers.

Write for full information concerning the De Laval Milker

The De Laval Separator Company
NEW YORK, 165 Broadway
CHICAGO, 29 East Madison Street
SAN FRANCISCO, 61 Beale Street



Sooner or later you will use a De Laval Milker or Cream Separator

that while she made this record she carried a calf full time and was in milk 310 days.

Financial King's Interest is a cow of good size for the breed, weighing about 850 pounds. The reproduction gives but a meagre idea of this animal as she really looks. One cannot help but notice her symmetrical udder. At the age of more than 20 years we could scarcely expect to find such levelness and squareness of the udder, which in her case does not even show a tendency towards being pendulous, a condition so common in aged cows. Summing up all points she shows a good dairy type throughout, is very alert and vigorous.

Has Produced 19 Calves

Not only has Financial King's Interest been a good producer of milk and butterfat, but she has also been a consistent breeder. She has dropped, to the time of her last freshening, nineteen calves, eighteen of which are alive today. The remarkable fact is that seventeen of the eighteen alive are females. She is now carrying a calf sired by Financial Sensation, her own grandson, out of her own daughter, who has a record of 595 pounds of butter at two years of age.

This great cow looks fully capable of making another record at her next freshening.

MILK FAIRIES PLAY TRENTON, NEW JERSEY

The first city in the Philadelphia Milk Shed to share in the publicity activities, of the Inter-State Dairy Council, was Trenton, New Jersey. Considerable preliminary work had been done by the Health Council in that city and the Local Chapter of the Red Cross and other co-operating organizations lent their active assistance.

Dr. Leroy S. Wilkes, Medical Inspector of the Public Schools, had physical examinations made of every one of the 17000 children in the Public Schools, and is giving those under nourished a special diet, of which the larger proportion is milk.

Miss Hilda Kushman, and Miss Louise Fitzgerald of the National Dairy Council, Chicago, Ill., have been assigned to this field and are now identified with the Inter-State Dairy Council are participating in the Trenton campaign. Miss Kushman, who has had wide experience in organizing plays and pageants will train the children for the "Milk Fairies" play. Two casts were trained in Trenton and the play has been produced co-operatively

for the benefit of all the children of that city, their parents and friends.

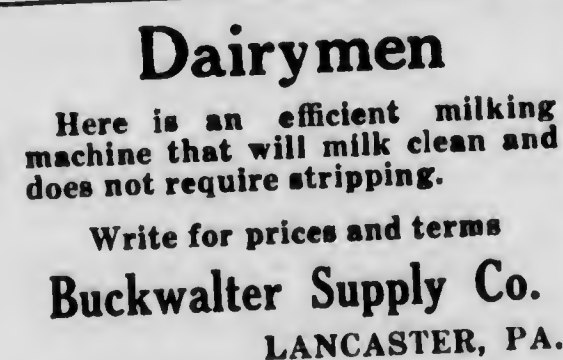
Sixteen boys of the Honeybrook, Pa., Vocational School organized a Poultry Club with Edgar Byers as Club leader. The club will hold monthly meetings at which time some special subject on "Poultry" will be taken up. They have set their goal to make \$1,000 for every 400 hens in the club. The club will start March 1st and feed their flocks a good ration. Also they will hatch chicks from eggs of the best laying strains obtainable. In August the flocks will be culled. Another Poultry Club is in process of organization in the Brandywine Farmers Club. They will have the same program as the Honeybrook Club.

Standard-bred poultry is more attractive in appearance and appeals more strongly to purchasers of stock and eggs.

Standard-bred poultry offers a greater combination of practical and useful qualities suitable to the needs of the farmer and poultry keeper.

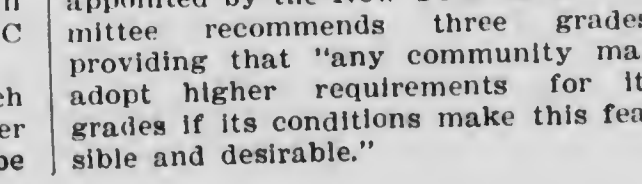
The products of standard-bred fowls are more uniform in quality are in greater demand, and bring better prices.

Standard-bred poultry means greater success and better profits.



For some time the Pennsylvania State Board of Health has had under consideration more stringent regulations regarding the pasteurization of milk, particularly in the cities, towns, boroughs and townships in the state. Considerable publicity has been given a proposed bill which was in the course of framing for this purpose. The Inter-State Milk Producers Association protested against the bill in its original form and we are now advised that the proposed legislation will not be introduced at this session of the Legislature.

which prohibits the use of any other grade terms except "Certified," "Grade A Raw," "Grade A Pasteurized," "Grade B Raw," "Grade B Pasteurized," "Grade C Raw," "Grade C Pasteurized."



United States Bureau of Animal Industry score card.

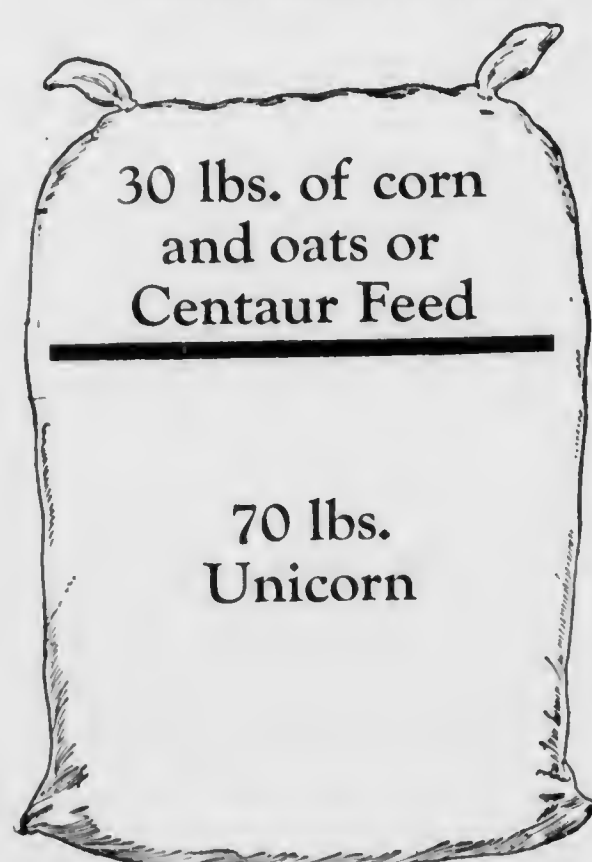
GRADE B

Milk of this class from cows free from

(Continued on page 12)

"High-Priced" Unicorn Makes Low-Cost Feed

Feed this way
with clover hay



For November, four out of the ten highest cows in all Indiana cow testing associations were fed Unicorn.

Average milk . . . 1609.5 lbs.
Average fat . . . 59.9 lbs.

Those who are not feeding Unicorn say that it is "high-priced."

Those who *are* feeding Unicorn say that it gives them a greater profit than they can get with any other feed.

The Unicorn feeders know that it's not the price of a thing that counts, but how much you get for your money.

There's more milk *and* more profit in a ton of Unicorn than there is in a ton of any other feed—home-mixed or boughten.

Use Unicorn and cut down your feed bills. Goes farther. Lasts longer. Actually *costs less*—not more.

CHAPIN & COMPANY

Chicago

New England Office at Boston

(Continued from page 11)
disease as determined by physical examination, of which one each year shall be by a qualified veterinarian and shall be produced and handled under sanitary conditions, such that the bacteria count at no time exceeds 1,000,000 per cubic centimeter. All milk of this class shall be pasteurized under official supervision, and the bacteria count shall not exceed 50,000 per cubic centimeter when delivered to the consumer.

It is recommended that dairies producing Grade B milk should be scored, and that the health department or the controlling department, whatever they may be, strive to bring these sources up as rapidly as possible.

GRADE C

Milk of this class shall come from cows free from disease, as determined by physical examinations, and shall include all milk that is produced under conditions such that the bacteria count is in excess of 1,000,000 per cubic centimeter.

All milk of this class shall be pasteurized, or heated to a higher temperature, and shall contain less than 50,000 bacteria per cubic centimeter when delivered to the consumer.

Whenever any large city or community finds it necessary, on account of the length of haul or other peculiar conditions, to allow the sale of Grade C milk, its sale shall be sur-

rounded by safeguards such as to insure the restriction of its use to cooking and manufacturing purposes.

The committee on organization and administration of milk control through its chairman, Dr. Wm. H. Price, of the U. S. Public Health Service, reported at the annual convention of the International Association of Dairy and Milk Inspectors in December, 1919, in part as follows:

"Some differences in opinion exist among members of the committee regarding the relative importance of Milk Grading in promoting accomplishment of the purposes for which milk control is attempted. It is the opinion of some that grading is a primary factor to those ends, and that food value contained as indicated by butterfat content, cleanliness of production and handling, bacterial counts, and other factors should be considered in measuring grades. Others believe that grading is secondary in importance to other procedure. All agree that provision of grades permits choice on the part of the consumer and that such discrimination in purchasing assists in raising the average of all milk supplies, provided a readily understood system which involves no more than three grades is operated by the public authorities. All likewise agree that the requirements for the lowest grade should be adequate to insure standard food value and to protect the public health. It is the

opinion of the committee that milk grading as operated by some private and commercial agencies borders closely on if it does not intermingle with fraud. Successful grading depends on correct conception of what producers are willing to produce for an advance in price and of what consumers are willing to pay an advance in price for, as well as on a statement of what health authorities declare to be a superior or an ideal product. Laws providing for grades which fall to materialize on the market bear testimony to the fact that such grades were not conceived with understanding and that legal enactment alone is not sufficient to accomplish reform."

There is no doubt but that as at present administered in some of the cities in this State the system of grading prevailing or lack of system, is nothing short of fraudulent, enabling dealers to sell milk for two to four cents per quart in advance over the bulk of the supply which from a food or sanitary standpoint, in fact, in instances have come to our attention where so-called Grade A milk contained less fat and more bacteria than Grade B milk handled by the same firm, as reported by a reasonably efficient city health department. Something is evidently wrong with the system.

While it is not within our province

(Continued on page 13)

EASTON (MD.) MEETING

Federation of Farm Organizations

Under the direction of a Federation of Farm Organizations, including the locals of the Inter-State Milk Producers Association, at Easton and Cardova, Maryland, the Easton Grange and the Farmers Clubs of Easton and Trappe, Maryland, an oyster bake and meeting was held in Easton, Md., on February 22nd.

The oyster bake was held in a large garage and some 200 bushels of oysters and "trimmings" was provided.

The afternoon session was held in the Court House. Music was furnished by the Easton Band. At 1:30 o'clock the meeting was called to order by the chairman, president of the Federated Organizations, who made an address on the necessity of closer co-operation among the farm organizations and the farmers of the Eastern Shore. Prof. Simons, of College Park, Md., and John H. McSparran, master Pennsylvania State Grange, also made interesting addresses.

The evening session opened with orchestral music and community singing. Prof. Richardson, of the Maryland State College, made an interesting address on "Improved Rural Home Life" and H. D. Allebach, vice president of the Inter-State Milk Producers Association, spoke on co-operative efforts, particularly in connection with organization.

The closing feature of the evening entertainment was the showing of the film, "The Fountain of Youth," which is being used by the Inter-State Dairy Council in the furtherance of its publicity campaign toward the greater consumption of milk.

TEMPLE OF AGRICULTURE

Thirty-six States have participated in the campaign to raise funds for the Temple of Agriculture in Washington, D. C., contributing a gross total of \$57,415.77. The Washington & Northern Idaho Division stands at the top of the list with a total of \$20,549.49. Pennsylvania comes second with \$16,400.54. Maryland third with \$2,812.37. New York fourth with \$2,159.30, and California fifth with \$1,839.70. The National Farmers' Educational and Co-operative Union, an organization, has contributed \$3,000.00. The New England Milk Producers' Association has sent \$2,000.00, which will be distributed by States as soon as the lists of contributing locals are received.

The details of the contribution from the Inter-State Milk Producers' Association campaign for January are:

From the Association to date ..	\$174.25
Previously reported from Delaware ..	10.00
Previously reported from Maryland ..	27.00
Previously reported from New Jersey ..	87.00
Previously reported from Pennsylvania ..	11.00
Rafael Ryan, Pottstown, Montgomery county ..	2.55
From Pennsylvania in Jan.	2.55
From Pennsylvania to Feb. 1.	13.55
Total from Inter-State Milk Producers' Association campaign for January ..	\$ 2.55
Total from Inter-State Milk Producers' Association campaign to February 1 ..	\$312.50

We had an old horse named Barney. He died when he swallowed a Comeo.

They made boots from his hide

Both narrow and wide,

And the rest was made into Oleo.

SUGGESTIONS OR FERTILIZER APPLICATIONS

By W. G. Vandegrift

Corn: On good soil where manure is applied or clover sod turned down, broadcast 250 to 500 pounds acid phosphate, the use of nitrogen under these conditions does seem profitable. Less than 250 pounds of phosphate or mixed goods may as well be applied in the planter.

In the absence of manure or a good sod it is advisable to use the above amounts of a 2-12-0 or 3-12-0 applied broadcast, the amount depending on the grade of fertilizer used, the fertility of the soil and the necessity for a maximum crop.

On very poor or light soils, in the absence of manure, 3 to 5 per cent. of potash in addition to the above may pay.

Where a quick, vigorous start is desired 100 pounds of 3-12-0 or 4-10-0 may be used in the planter in addition to any of the above broadcast applications.

Wheat: The above recommendations apply nearly equally well for this crop but 2 to 3 per cent. of ammonia is especially desirable for late seedlings on good land.

Oats or Buckwheat: On soil in good fertility 200 to 300 pounds of acid phosphate is all that can be recommended. On poor soils where little manure has been used in the rotation the above amounts of 2-10-0 may prove profitably and 3 to 5 per cent. of potash may increase the yield on impoverished land.

Grass: On good timothy sods capable of yielding 1 to 1-1-2 tons of hay per acre 100 pounds of nitrate of soda or sulphate of ammonia, applied in April, should increase the yield by 1000 to 2000 pounds per acre. Better yields and more even distribution will generally be secured if 100 to 150 pounds of acid phosphate is added. On land which will produce two tons of hay per acre unfertilized, increases from top dressing are smaller.

Potatoes: On good soil, liberally manured, 500 to 1000 pounds of acid phosphate or 2-12-0 applied at least half in the row is advisable. In the absence of manure or a clover sod the nitrogen had probably best be increased to 3 or 4 per cent. Where no manure is used 3 to 5 per cent. potash is generally profitable. Where more than 500 pounds of high grade fertilizer is applied in the row it should be mixed with the soil somewhat and not all directly in contact with the seed.

Pasture: On thin upland pasture applications of lime and 300 to 400 pounds of acid phosphate in fall, winter or early spring have greatly improved the sod and carrying capacity. 1000 pounds of Basic Slag may be used to furnish both lime and phosphate. Where the sod is very thin clover and grass seed harrowed in early spring increases the effect of fertilization.

HOME MIXING OF FERTILIZERS

Mixture suitable for corn where nitrogen seems to be needed.

7 parts (by weight) of 16 per cent. acid phosphate.

1 part nitrate of soda or sulphate of ammonia.

2 parts 6 per cent. tankage.

Approximate analysis of above 3 per cent. ammonia, 14 per cent. phosphoric acid. One ton of this is equivalent to 1 1-2 tons of 2-9 and costs but little more.

Bone meal, steamed or raw, may be substituted for the tankage as a dryer. If used at once and if the phosphate and nitrate are in good condition, no dryer need be used.

For truck crops and potatoes 5 per cent. of potash may be added by substituting one part of muriate of potash for one part of acid phosphate. At present prices potash is a questionable investment for other crops except on very poor soils in the absence of manure. For crops like early potatoes or truck, which need a quick start, add another part of nitrate of soda, making the analysis 4 1-2-12-0. One part by weight of acid phosphate mixed with four parts of clean,

LOUDEN

LABOR SAVING BARN EQUIPMENT

More Milk—A Cleaner Barn With Half the Work

When you add to the milk gain, the daily saving of time in doing your barn work—the better health and more contented state of your cows—the saving of feed—the greater pleasure and ease of doing the chores and the extreme cleanliness of your barn—if you could figure all of these things out in dollars and cents you would find that Louden Barn Equipment

Pays a Big Profit Every Day in the Year

Louden Stalls and Stanchions save time and labor in handling cows morning and evening—give the herd real pasture comfort in the barn, which enables them to produce on an average of one-fifth more milk. And with the Louden Built-Up Manger Curb you save many a pound of feed that would otherwise be nosed out onto the stall floor. Louden Litter Carriers take out the equal of five wheelbarrow loads of manure each trip—takes it clean without dripping or scattering—takes it away from the entrance and dumps it.

Operates smoothly on roller-bearing trolleys—makes barn cleaning an easy job of minutes instead of hours. Louden Feed Carriers bring the feed for 20 cows at a single trip. Louden Detachable Water Bowls do away with that cold disagreeable chore of turning the cows out twice a day to shiver through a drink of icy tank water, and, better yet, they boost the milk yield as much as 40%.

For 53 years Louden Equipment has been making barn work easier. The million farmers who use it prefer it because of its greater simplicity and strength; its freedom from trouble-making attachments; its special features of comfort and safety for cows; its easy installation in any barn, and its quality construction. Yet with all of these strong features, Louden Equipment is not expensive.

Get These Two Helpful Books

The Big Louden Catalog—224 pages—tells all about the full line of Louden Labor Saving Barn Equipment—Stalls and Stanchions, Litter and Feed Carriers, Water Bowls, Animal Pens, Hay Unloading Tools, Power Hoists, Barn and Garage Door Hangers, Cupolas, Ventilators—“Everything for the Barn.”

The Louden 112-Page Barn Plan Book—full of helpful information for the prospective barn builder. Plans and pictures of 74 different

The Louden Machinery Company
6802 Court Street (Established 1867) Fairfield, Iowa
Branches: St. Paul, Minn.; Albany, N. Y.; Chicago, Ill.

Fill Out and Mail the Coupon Today



Please send postpaid, without charge or obligation, book checked below:
☐ Louden Barn Plans
☐ Louden Illustrated Catalog
I expect to build (remodel)

a barn for.....cows.....horses.
Am interested in Litter Carriers.....
Stalls and Stanchions.....Water Bowls.....

Name.....
Post Office.....State.....

dry poultry manure makes a good fertilizer, two tons of which is equivalent to one ton of a 3-8-1 fertilizer.

For top dressing timothy sods in early spring use equal parts of acid phosphate and nitrate of soda or sulphate of ammonia. This will analyse 9 to 12 per cent. ammonia and 8 per cent. phosphoric acid. Apply immediately after mixing.

Miss Louise Fitzgerald, of the National Dairy Council, Chicago, Ill., now associated with the Inter-State Dairy Council, Philadelphia, has been identified with extension work in North Dakota, particularly in the organization of boys and girls clubs. She has also been an extensive Red Cross worker in New England, particularly in health and Americanization work.

Fair and Warmer

"Well, Bill," asked a neighbor. "Hear the boss has had a fever? How's his temperature today?"

The hired man scratched his head and decided not to commit himself.

"Faint fer me to say," he replied.

"He died last night."—Ex.

NEEDS OF STANDARD GRADES FOR MARKET MILK

(Continued from page 12)

"It is certain that, in the final analysis, economics govern all phases of the milk problem, absolutely. It is equally certain that prevention of fraud and sanitary control are logical responsibilities of health authorities.

It follows that, in attempting such control, health authorities should employ such methods as will prevent fraud, insure safety, and promote cleanliness in production and handling, and, at the same time, run parallel with and not interrupt normal practices of production, handling, and distribution, to the end that sufficient supplies, without unwarranted extravagance, may be maintained."

Considered from an economic standpoint, the varied systems of grading of milk now in vogue in the various cities of this State are confusing and unbusinesslike. The present system, no system, or confusion of systems in use is at least in part responsible for the high cost of milk distribution. The system should be uniform throughout the State; it should be simple so as to enable consumers to buy the kind of milk they want intelligently, and

make the system easily enforceable, as well as to prevent unfair competition and fraud. Such a State-wide, uniform system of grades should be determined after careful thought and after considering the effect it will have on increasing the safety of our milk supply as well as the economic effect that such a system would have on production, distribution and consumption.

American farmers suffer losses every year through inferior seed. If seed is foul with weeds or if the seeds are dead, the loss can not be made up once the crop is in the ground. If a crop is to be planted in April, discovery of poor seed in May does no good. The remedy is to test seeds in a home germinator in advance of planting.

Getting it Straight

"Is you gwine to de party dis evenin', Sam?"

"I ain't sayin' I ain't."

"I ain't askin' you is you ain't; I see askin' you ain't you is?"

FEED UP

Do This—

Give your dairy feed the *PROFIT-OVER-FEED* test. Weigh your feed. Weigh your milk. At the end of a month, subtract the cost of the month's feed from the month's income from the milk. Put this figure* down where you can refer to it in thirty days.

Then ask your dealer for **BUFFALO CORN GLUTEN FEED**, the protein feed that makes milk. Mix up your self, at home, 2 parts of **BUFFALO CORN GLUTEN FEED**, with 1 part of wheat bran or mill feed, and 1 part of ground oats. *You can mix up a ton in a half-hour—and few jobs will pay you better.* Feed this mixture liberally. Keep the daily feed and milk records for another month, as before. Then subtract the cost of the month's feed from the month's returns from the milk. Check this margin-of-profit figure* with the other one.

It probably won't take a whole month to convince you that it pays to feed **BUFFALO CORN GLUTEN FEED**.

Write us for literature giving mixture for feeding BUFFALO CORN GLUTEN FEED. If your dealer cannot supply you, tell us who and where he is. Write to

Corn Products Refining Co.
New York Chicago

ANNUAL MEETING

South Jersey Holstein Friesian Assn.

The annual meeting of the Salem, Cumberland and Gloucester Holstein Friesian Association was held at Shiloh, N. J. February 14th, 1921. The attendance was larger than at any previous meeting.

The reports of the secretary-treasurer showed that the organization had been successful, from a financial standpoint and that much had been done to advance the interest in the Holstein breed.

The officers and directors were unanimously re-elected to serve for 1920 and include President: W. S. Garrison, Roadstown, N. J., Vice-president: S. W. Ridgeway, Salem, N. J., Secretary: A. H. Bullard, Jr., Salem, N. J., and Treasurer: J. P. Ridgeway, Hancock's Bridge, N. J. The directors are: N. S. Garrison, and Frank Newkirk, Roads-

town, N. J.; J. H. Johnson, Yorktown; S. L. Moore, Elmer; T. M. Tice, Deerfield; J. P. Ridgeway, Hancock's Bridge; and S. W. Ridgeway, and A. H. Bullard Jr., Salem, N. J.

Following the business session Prof. Reagan of New Brunswick, N. J., made an address in which he advised the breeders to concentrate one line of blood and as the King Segis blood line was the more general in South Jersey, it might be well to concentrate on that line.

J. W. Bartlett, recently elected Holstein Friesian State Secretary spoke upon the value of co-operation in matters of breeding, legislation, and sales of surplus stock. The State Association was instrumental in obtaining from the State an additional appropriation of \$30,000 to be used this year in connection with the eradication of tuberculosis cattle.

H. D. Allebach, vice-president of the Inter-State Milk Producers Assn.,

made an address reviewing the general milk situation.

County Agent Trumwell and Secretary Bullard made brief remarks on the local county fair to be held in August next. Probably exhibitors of cattle were advised to begin now in the preparation of their show cattle. Prizes and premiums will be awarded which will be of interest to the smaller breeders. It has not yet been decided whether the exhibit and fair will be held at Bridgeton or Pitman, New Jersey.

Following the program a moving picture film "The Fountain of Youth," showing the health producing qualities of milk, furnished by the Inter-State Dairy Council, was shown.

The children may not be getting their pint of milk a day. Have you thought out ways of making sure that each one takes his share?

SOUTH JERSEY FARMERS EXCHANGE ANNUAL MEETING

The South Jersey Farmers Exchange, with headquarters at Woodstown, N. J. recently held its twelfth annual meeting and annual election.

The directors elected for the ensuing year were:

Asa Moore.....Mullica Hill
James C. White.....Sewell
Asher B. Waddington.....Woodstown
John J. Hitchner.....Daretown
George Horner.....Harrisonville
James Chapman.....Bridgeton
J. Harry Kandle.....Elmer
A. B. Lippincott.....Woodstown
Oscar Ware.....Woodstown
S. Frank Powell.....Salem
Clement Mitchell.....Shiloh
George E. Waddington.....Woodstown
A. W. Padgett.....Deerfield
James M. Tweed.....Williamstown

Reports of the president, treasurer and manager were presented.

The actual total amount of sales for 1920 was \$2,844,833. Over 10,000 tons of fertilizer, 11,594 tons of feed, 950 tons of lime, and 4688 bags of seed potatoes were handled, giving an idea as to the volume and character of business done by this co-operation organization.

An eight per cent dividend was paid out of the 1920 earnings, after a comfortable sum had been set aside to the surplus account.

Warehouses are maintained at Woodstown, Daretown, Mullica Hill and Salem, New Jersey.

BETTER MILK PRODUCTION IN PENNSYLVANIA

Headed for better and greater milk production for Pennsylvania with the hope of establishing the State as the foremost dairy center in the country, Pennsylvania farmers and dairymen, with the assistance of the cow-testing associations are making rapid strides in the industry. With a total of seventy-one associations now in operation, Pennsylvania ranks second in the United States in the number and scope of work accomplished in bettering dairy production.

According to a statement just issued by the Agricultural Extension Division of the Pennsylvania State College, which directs county agent work throughout the State, 1922 farmers and dairymen are members of the 71 cow-testing associations. A total of 71 "boarder" cows were discarded from their herds as a result of the test that showed them to be producing less milk than the cost of their feed warranted. This figure is somewhat lower than last year due to the fact that so many associations were operated for the first time in 1919 and the percentage of poor cows was much higher. Each year as the association members benefit from the tests the number of discarded cows grows.

There were 24,215 cows tested in the association in 1920, and those tested by individuals brought the total up to 25,646. Slightly more than two per cent. were discarded. The existence of the cow-testing associations is working wonders for the dairy industry in Pennsylvania. The desire for better cows brought about through the association tests brings on the need for pure bred stock and a first-class herd bull. Many co-operative bull associations have grown out of the work with results that will be astonishing in a few years.

Fewer Boarding Houses in Pennsylvania Serving Butter Substitutes

Oleomargarine licenses to the number of 5,231 were issued by the Bureau of Foods, Pennsylvania Department of Agriculture, during the first seven weeks of 1921. This is 1,053 less licenses than were issued during the entire year of 1920 and indicates that the current year will at least equal last year's record.

During the first seven weeks of 1920 the bureau issued 102 licenses to boarding houses for the serving of oleomargarine while during the same period this year only 71 boarding house licenses were issued.

FEBRUARY MILK CONDITIONS

(Continued from page 1)

there does not appear, under the present reconstruction movement, any means of avoiding the situation. Manufacturers of milk products must either meet market conditions as they prevail and compete with products made from low price milk or discontinue manufacture.

The butter market has been up and down the ladder during the month. Early in February 92 score creamery butter, New York City, was at 49½—the market declined sharply to the low level of the month which was 43 cents. A gradual up turn followed bringing the price to 53½ cents, the highest figure at the close of the month. Heavy importations of Danish and Argentine butter and some shipments from New Zealand were received. Approximately 15,000 casks of Danish butter was received with some 11,000 casks afloat. Upwards of 3,500 boxes of butter were received from Argentina with 5,000 boxes afloat. Danish butter was sold down to 42½ cents a pound in New York.

The average price for 92 score butter for the month ending February 24th was 46.8 cents, representing a basis of \$2.24 per hundred for 4% milk as a price for surplus milk for February.

The condensed milk market continues weak and irregular. Manufacturers of advertised brands of sweetened condensed milk cut prices \$1.50 a case early in the month, without inducing any important buying. The nominal quotation is \$7 to \$8 a case. Unadvertised brands can be bought down to \$6 a case, but trade is reported quiet. Evaporated milk ranges from \$4.85 to \$5.25 per case for miscellaneous brands.

The whole milk market as far as the immediate future is concerned, is just holding its own. The weakness has been principally due to offerings from outside districts where lower prices prevail. In Pittsburgh the March price for 4% milk is quoted at \$2.60 at country plants, and 27½ cents a gallon f. o. b. Pittsburgh for 3.5 fat, with a retail price of 14 cents a quart. The basic price of 4% milk f. o. b. Baltimore is 30 cents a gallon or 7½ cents a quart and 14 cents a quart retail. March surplus milk is to be paid for at 20 cents per gallon. The New York price for 4% milk in March is reported at \$2.50 per hundred in the 200 mile zone. At present prices for whole milk in the Philadelphia market, the average for the three months, about equals the average price for the same period in some of the other primary markets, where higher prices prevailed earlier in the year.

Miss Hilda Kushman, of the National Dairy Council, Chicago, Ill., is now identified with the publicity work of the Inter-State Dairy Council, Philadelphia. Miss Kushman has been extensively identified with settlement work in Chicago, particularly among the foreign classes. She organized and staged most successfully the "Milk Faries" play in the "Use More Milk" campaign, in the schools of Detroit, Mich. last year.

McKosh Walls, has been elected to serve as secretary-treasurer, and Jesse Slaughter, vice president of the Millington, Md. local. Harvey Poole was re-elected president to serve for the ensuing year.

Harry Redmill, Kennedyville, Md., has been elected president and William L. Ford, Still Pond, Md., secretary of the Kennedyville local.



"The test cup action is superior to anything else on the market." —ALVIN VOIGT.

Perfection Milks Just Like the Calf

IF you put your finger in a calf's mouth and then in the teat cup of the Perfection you won't feel a particle of difference. The gentle suction followed by a downward squeeze, followed by a period of rest is a perfect copy of the calf's action. Human hands can't duplicate the calf's milking. Perfection's way is nature's way of milking. That's why it pleases the cow. This natural action is made possible by Perfection's downward squeeze, a

patented feature not found in any other milker.

Whether you have grades or high priced pure bred cows will like it. Most owners tell us the milk flow increases when the Perfection is used.

Not only can you milk better with the Perfection but you can milk quicker and cheaper. One man with the Perfection does the work of three hand milkers. Here's a chance to save wages and be independent of hired help. Investigate this better way of milking.

How To Investigate

Write for your free copy of our book, "What the Dairyman Wants to Know." It answers every question about milking machines.

Why Milk By Hand? Cows prefer Perfection's natural action.

Perfection Manufacturing Company

448 S. Clinton St.
Syracuse, New York

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PERFECTION MILKER



INTERNATIONAL SPREADER

ROLLER BEARING TIGHT BOTTOM EASY PULL
Do not rob your soil or yourself by failing to return the most valuable fertilizer to the soil. The right use of a spreader is an investment that will pay for itself in a couple of years. And the International is the right spreader to use, so declare countless enthusiastic International owners.

Write for descriptive folder

Motor Trucks Farm Operating Equipment
International Harvester Company
OF AMERICA



Philadelphia Branch, 216 N. 23rd Street
Harrisburg Branch, 813 Market Street



Your Private Cow Doctor

If cows could tell their feelings, many a serious illness would be prevented, and constant milk losses would be saved.

Milking cows, particularly, are subject to many ailments that are first manifested only in a reduced milk yield.

Such cow ills you can treat yourself with the aid of Kow-Kare, the great cow medicine. At the first sign of reduced milk flow try Kow-Kare. Use it according to directions and watch the story the milk pail tells.

Dairymen everywhere know the value of Kow-Kare both in preventing disease, and in treating such ailments as Barrenness, Abortion, Retained Afterbirth, Scouring, Lost Appetite, Bunches. No cow barn should be without Kow-Kare, your private cow doctor. Sold in 70c and \$1.40 packages by feed dealers, general stores and druggists.

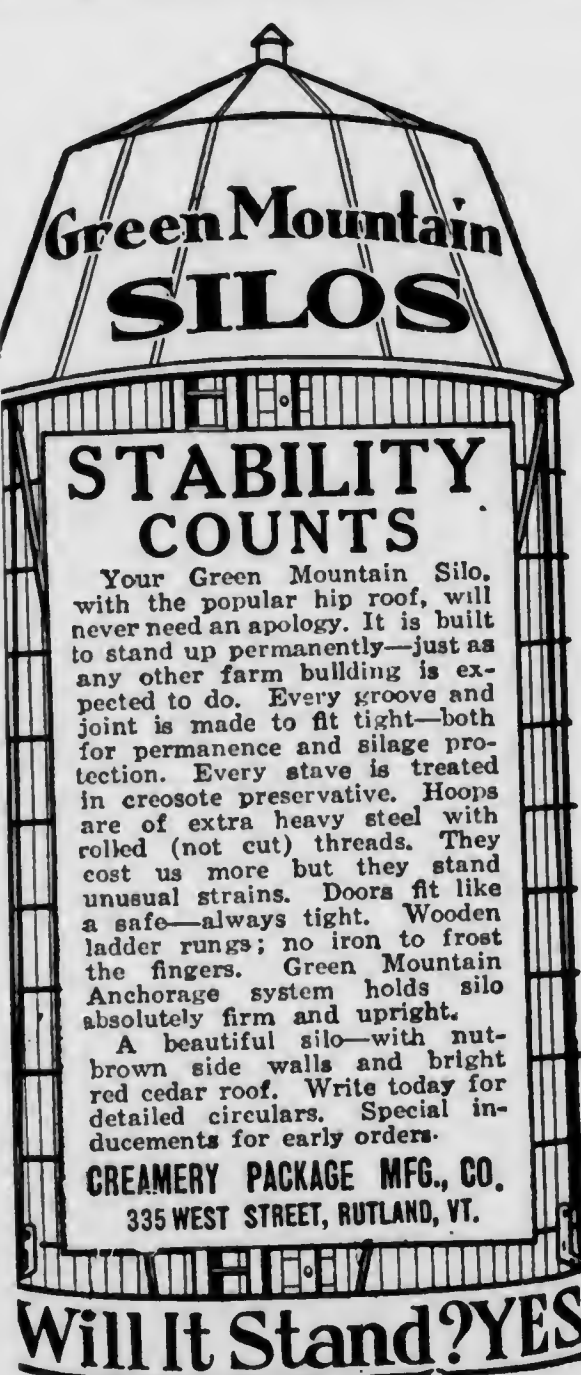
Write for free book, "The Home Cow Doctor."
DAIRY ASSOCIATION CO.
LYNDONVILLE, VT.

MOLASSES

For the Health of Your Cattle

FEED

Its Pure **LASCO** That's Sure
PURE PORTO RICO MOLASSES
Write for free booklet on cattle feeding
Universal Molasses & Products Co.
32 COURT STREET BROOKLYN, NEW YORK



Green Mountain SILOS

STABILITY COUNTS

Your Green Mountain Silo, with the popular hip roof, will never need an apology. It is built to stand up permanently—just as any other farm building is expected to do. Every groove and joint is made to fit tight—both for permanence and silage protection. Every stave is treated in creosote preservative. Hoops are of extra heavy steel with rolled (not cut) threads. They cost us more but they stand unusual strains. Doors fit like a safe—always tight. Wooden ladder runs; no iron to frost the fingers. Green Mountain Anchorage system holds silo absolutely firm and upright. A beautiful silo—with nut-brown side walls and bright red cedar roof. Write today for detailed circulars. Special inducements for early orders.

CREAMERY PACKAGE MFG. CO.
335 WEST STREET, RUTLAND, VT.

Will It Stand? YES

Reading Bone Fertilizer

Quality Service Satisfaction
Feeding the World: The American farmer's job. To do your utmost the land should be fed too. Stick to the old dependable when it comes to feeding the land—Reading Bone Fertilizer.

(This trade mark means quality)
Reading Bone Fertilizer Co., Reading, Pa.

Ask your dealer for Reading Bone Fertilizer. Write for booklet and further information.



Why Join a Testing Association?

(Continued from page 1)

ered herd sires. This means that 45 per cent. of the state associations are reporting 100 per cent. free from scrub bulls. Some of these fortunate associations at first reported from seven to thirteen scrub bulls. These were replaced last year by creditable bulls.

About 60 per cent. of the members fed balanced grain rations to their cows. In many instances, very little grain of any kind was fed upon the first month's visit to some members. Through the encouraged practice of grain feeding, George Suda, tester in the Highland Association, reports "one member has increased the herd milk flow 50 per cent. since grain feeding started."

Liberal Feeding of Concentrates

The following information has been taken from the consolidated reports of the Richland Buena Vista Cow Testing Association.

Feeding of concentrates is still a live question among many of Wisconsin's dairymen, and for those who desire some practical information on this subject the 536 cows that completed the full year in the association were divided into six groups, and tabulated according to the cost of their concentrate ration.

Gp.	Cost of concen. between cow	Av. Cost per cow	Av. total feed cost per cow
1.	\$50.00-75.00	\$ 57.13	\$120.05
2.	40.00-50.00	143.29	106.47
3.	30.00-40.00	33.29	94.88
4.	20.00-30.00	25.31	82.93
5.	10.00-20.00	15.56	72.54
6.	00.00-10.00	6.21	57.91

Some interesting comparisons are afforded between groups 3, 4 and 5. By comparing groups 3 and 4, it is found that an investment of \$12.00 in feed yielded \$17.00 increased returns. In comparing groups 4 and 5, it will be found that a \$10.00 additional investment for feed returned \$15.00 more income.

As these three groups constitute over 80 per cent. of the cows tested, representing all types, and under various conditions, it is safe to assume that the amount of feed is one of the most important factors in economical production with the average cow.

Continued testing makes better feeders of the members. During the year of 1917, the amount of concentrate feed averaged but 638 pounds per cow, while in 1919, the average was 1216 pounds grain per cow. One man who did not believe in feeding grain, joined the association and after being persuaded to follow a plan of more liberal feeding obtained the following results:

	Concentrate feed	Returns per cow
First year	446 pounds	\$56.00
Last year	838 pounds	86.06

Mr. Sam Olson, during his first year in the association, fed an average of 760 pounds concentrates per cow and his returns were \$78.13 on each cow. Last year his grain ration averaged over 1,500 pounds per cow and they returned \$155.80 above their feed cost; doubling the pounds of grain per cow had practically doubled the returns per cow.

An experiment in the Loganville association clearly demonstrated that the drinking cup system showed an increased production on one herd of seven cows on an average of 122 pounds of milk per month. This showed a 14 per cent. increase in milk flow.

Some of our cow testing association cows have netted their owners a neat sum of money because a public record is attached to them. For example—Mutual Segis Piche De Kol, 315906, a registered Holstein owned by Pierce Bros., Monticello, Wisconsin, was recently sold at private sale for \$1,750. As a three-year-old and before any rec-

ord was made this animal was offered for \$250. Today she has a four-year-old record of 14,447 pounds of milk and 446.9 pounds fat. She has also completed a seven day record of 20.58 pounds fat from 757 pounds of milk. This is the banner milk record in Green county. Is it worth your time to clear \$1700 on a \$250 investment?

The Melvin Thompson pure bred Holstein herd, developed in the Barneveld Cow Testing Association, was recently sold at auction and averaged \$302 on 49 yearlings and 6 bulls. This included 10 heifer calves, 9 yearlings and 6 bulls. Three of the cows brought over \$800 each. The grade cows sold for \$125, which was more than twice as much as the average price brought at a sale of untested cows sold in Iowa county a few days previous to this sale.

The dairyman who does not keep production uppermost in mind, cannot make the greatest success. When at a dairy cattle sale, we find that the animals which have creditable cow testing association records are the ones buyers clamor for. When a man buys cows for his future herd, he is willing to pay a substantial premium for a known production. It is for this reason, together with the fact that authenticated production

No. of cows	Av. lbs. of fat	Av. Value of prod. per cow	Av. re. ab. feed cost
38	306.6	\$248.41	\$128.36
32	282.7	233.06	127.19
123	263.1	217.22	122.34
180	228.0	188.19	105.26
109	199.7	162.73	90.25
54	172.8	128.16	80.25

records encourage careful selection and better feeding and management that Advanced Registry and Cow Testing Association records have become so popular among progressive dairymen. It was for these reasons that the Register of Production, which requires that a cow produce 365 pounds or more of fat in one year, was established as a part of the cow testing association work in Wisconsin.

The rules require that a cow complete a year's record in a regularly organized Wisconsin cow testing association. An entry fee of \$1.00 is required upon application for registry and a certificate is received in return for having made an authenticated record in a cow testing association.

The Wisconsin R. O. P. was established—

1. To secure better breeding, better feeding methods and better care for Wisconsin dairy cows.

2. To emphasize the necessity of judging a bull according to the work of his daughters.

3. To increase the purchase and sale of cows on the basis of yearly production and of calves and bulls.

4. To establish recognized yearly records for pure bred and grade cows when these cows would otherwise be without records.

Mr. J. C. McDowell, of the U. S. Dairy Division said, "The Dairyman who doesn't know what his cows are doing is the man who loses out in the dairy business. He selects by guess, he feeds by guess, he breeds by guess and he is continually guessing as to how he is ever going to pay his debts. He works in ignorance when he might have knowledge. He flounders along in darkness when he might have light. Finally when such a man loses, he blames the soil, the climate, or the cows, when in reality he has only himself to blame."

Again, the cow testing association record is not of much consequence to the dairyman who continues dairying blindly with his old fashioned ideas, but the

(Continued on page 18)

Healthy
Pure-Bred

CHESTER COUNTY

Foundation
Stock

"THE COUNTY THAT COUNTS"

Guernseys

Maple Shade Farms

60 Registered Guernseys

The cows that give the high priced milk

Federal Accredited Herd No. 8430

HERD SIRES

Laverna's Ultra May King
24660 A. R.

Gerar Pearl's Royal 58411

His four full sisters records average 739.91 lbs. butter fat

M. T. PHILLIPS

Pomeroy, Pa.

Guernseys

May-Rose Breeding

HERD SIRES

LANGWATER HERO
No. 39634

Son of Langwater Heroine, A. R. record, 16221.1 lbs. milk, 805.64 lbs. fat in Class D.

LANGWATER ROYAL
25th, No. 63968

Son of Langwater Royal, the sire of three class leaders.

Use a Guernsey bull on your grade herd to raise the quality of your Milk.

M. M. Hollingsworth & Son

Landenberg, Pa.

ACCREDITED HERD

Holsteins



Crystal Farm

Home of
WINTERTHUR JOHANNA
PRILLY SEGIS 206498

The Outstanding Sire

He never failed to win the blue, 5 firsts at 5 Fairs, also Grand Champion 1920

His 6 nearest dams average 4.3% fat

Approved Cows Taken for Service

Cows and Bulls for Sale

Charles J. Garrett

West Chester, Pa.

FEDERAL SUPERVISION

Holsteins

Towns End Farms

OFFER a Yearling Bull

Towns End Prince Pietertje Ormsby

Whose five nearest dams have all made 20-lbs. or better

His sire is a 23-lb. grandson of King Segis and Hengweld DeKol. His dam is a 20-lb. daughter of a 23-lb. cow and is sired by Dutchess Ormsby Sir Model DeKol.

He is a handsome individual backed by persistent production. See him, see his dam, his sisters and his sire at our farm, or have him shipped to you on approval at our expense.

Price Right for Quick Sale

\$250 Delivered

ACCREDITED HERD

Jerseys

Financial Sensation
153793

"The Best Bred Bull in the World"

Heads the Herd at

Greystone Jersey Farm

West Chester, Pa.

The Greystone herd is one of the greatest Jersey herds in America and, in the line-breeding of the Financial King strain of Jerseys, are making great strides, both in type and production.

Tie up with the Greystone herd with a son of Financial Sensation, the \$60,000 sire.

Jerseys

BULLS

A Few Choice Heifers

from

A. R. O. Cows

sired by

Financial Satin Noble

\$100 and Up

80 to Pick From

HIGHLAND FARMS

West Chester, Pa.

ACCREDITED HERD

Ayrshires

Delchester Farms

Tell us your wants and we can supply them at prices you can afford to pay.

Aged cows, bred to Glenury, an A. R. son of Finlayston.

Aged cows, bred to Rena's Baron of Highland, an outstanding son of Baron's Best of Bagenoch.

Heifers, bred to these two great sires.

Young heifers.

Bull calves.

All the above stock carries some of the best producing blood of the breed with A. R. ancestry on both sides.

Herd free from tuberculosis

Delchester Farms

THOMAS W. CLARK, Supt.

Edgemont, Del. Co., Pa.

Ayrshires

CONSTITUTION QUANTITY CONFORMATION QUALITY

Stock of All Ages

Male and Female
for Sale

Prices and Pedigrees
on Application

Dr. E. C. DEUBLER

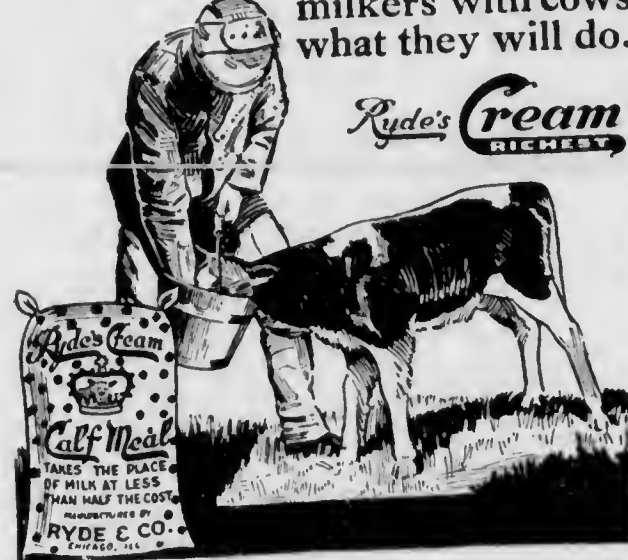
Berwyn, Pa.

ACCREDITED HERD

Mention the Review when writing advertisers

IMPROVE YOUR HERD

Cut Out the Boarders—With the high cost of feeds dairying is a close proposition. Replace the poor milkers with cows you raise yourself and know what they will do. The best for this purpose is



Ryder's Cream Quality Calf Meal

A complete food for young calves. Supplies them with every feeding element necessary for rapid growth in the most easily digested form. They thrive on it as on nothing else. Results Guaranteed

Saves Milk
Saves Calves
Costs Much Less to Feed

Sold in spotted bags that hit the spot with calves.
Ask your dealer or write
RYDE & CO. CHICAGO, ILL.

We are in the Market
for High Grade Tuber-
culin Tested Milk.

SPRINGDALE FARM DAIRIES

Wholesale Milk Products

2315 No. TWENTY-SEVENTH ST., PHILA., PA.

THE DAIRY LABORATORIES

5 North 20th Street, Philadelphia, Pa.

Consulting and Analytical Chemists
Complete Chemical and Bacteriological Analysis of Milk, Dairy Products,
Foods and Waters

FLY SPRAY TO KEEP FLIES OFF DAIRY CATTLE

Chlorine Solution to Sterilize Milk Utensils Write for information
Dr. Lee H. P. Maynard, Milk Expert H. C. Campbell, B.S., M.D., Ph.D., Chemist
Dr. H. S. Johnson, Bacteriologist Ralph Fort, Assistant
Branches at Washington, D.C. Pittsburgh, Pa. Baltimore, Md. St. Louis, Mo.

HIGH GRADE New York Stable Manure

PROMPT SHIPMENT IN CAR
LOAD LOTS AND BY BOAT

M. McGirr's Sons Company

264 WEST 34th STREET
New York City

1916 MARKET STREET
Philadelphia, Pa.



Cold weather with long nights is "just around the corner"—NOW is THE time to have your car's battery given a good outside charge and a thorough inspection for the strain that Fall and Winter will place upon it. HERE is the station to do the work—the station that places SERVICE FIRST and sales last. Recharging, repairing, rebuilding.

**Pusey & Young Storage
Battery Station**

WEST CHESTER, PA.

COATESVILLE, PA.

Which Way— Is Your Farm Going?

Is it moving toward greater fertility, greater production, greater earning power or is it moving toward lower production, decreased fertility and smaller income?

Many a Farm

That has been going back because of acid soil has been brought to fertility and profit by the regular application of

Michigan Pulverized Limestone

Calcite Brand Michigan Limestone is 99% pure. Taken from the largest limestone quarry in the world, dried and ground in the largest limestone mill in the country. Quantity production enables us to market cheaply.

**BUILD UP YOUR SOIL
WITH LIMESTONE**

Do It The Michigan Way
MICHIGAN LIMESTONE & CHEMICAL COMPANY
NEWTON S. GOTTSCHALL
General Eastern Agent
EAST GREENVILLE, PA.



Keep Farm Animals Healthy

—full of life and vigor.
International Stock Food Tonic helps them to properly digest and assimilate their food. Keeps their blood pure—helps them to avoid disease. The feed saved more than pays for it.

INTERNATIONAL Stock and Veterinary Preparations

—include International Stock Food Tonic, Hog Tonic, Worm Powder, Animal Dip, Phenol (Disinfectant), Calf Medicine, Powder, Diarrhoea Powder, Gall Salve, Poultice Preparations, Silver Pine Healing Oil and many others.

Successful for 30 Years
A steadily increasing demand for over a quarter of a century proves their popularity. There's an international preparation for every farm animal.

Ask Your Dealer

**ROSECOYD FARM'S
DUROCS OF QUALITY
GOOD PIGS FOR SALE NOW**
D. M. STOUT, HERRICK, PENNA.

KINDNESS TO ANIMALS PAYS ON THE FARM

Must be Made to Breed or Your Dairy Business will be a Failure. They

Can Be Made to Breed

By the use of

Hood Farm Breeding Powder

We say this confidently because it has been used with such marvelous results by so many breeders. Every cow at Hood Farm is treated with the Breeding Powder, and we know that it does make barren cows and heifers breed; we know that it checks and prevents abortion; we know that it makes cows clean quickly, thereby saving us hundreds of dollars annually.

Order today, mentioning this paper.

Prices prepaid \$1.15, \$2.75 and \$5.00.
Flexible Injection Tube, by mail, 90c.
Mammoth size Breeding Powder and Tube, prepaid, \$5.75.
C. I. HOOD CO., Lowell, Mass.

Why Join a Testing Assn.

(Continued from page 16)

records are of some value to him if he feeds, selects and breeds according to known production of his herd.

As a result of cow testing association records the good dairyman will—

1. Eliminate the unprofitable cows.

2. Raise the average production of his herd.

3. Practice liberal feeding of a good grain ration.

4. Buy his winter feed supply co-operatively.

5. Learn the value of his herd sire through the production of his daughters.

6. Help in selection of heifers for future herd.

7. Increase the valuation of the herd.

8. Study the records in the herd record book, develop the knowledge of what each animal is doing and develop personal pride and interest in the herd.

10. Locate the persistent milkers and from such cows choose his future herd.

—Holstein-Friesian World.

WHY WHEAT DECLINED

The fall in wheat prices, which has ruined so many farmers, has been due mostly to natural causes and not to any appreciable extent to market manipulation, says the Federal Trade Commission in a report to the President. The Commission gives seven reasons for the price declines, which the Wall Street Journal reprints as follows:

1. The world yield for the crop year 1920 will be larger than 1919.

2. Foreign governmental buying, which previously met a single seller in the United States, and does not now, has been characterized by heavy buying in the spring of 1920, and by slack purchases later, and is thus involved in the decline.

3. Unprecedented importations of wheat from Canada into the American market.

4. The record-breaking yield of corn and oats have been factors in the depression of wheat.

5. Slackening in the domestic demand for flour during the latter half of 1920.

6. Tendency to decline in many commodities has had its effect.

7. The change in credit conditions, with the resulting disposition of distributors to refrain from accumulating or maintaining usual stocks, has had its bearing.

LYONS, PA., LOCAL ADOPTS RESOLUTION

Resolved:

That we as members of the Lyons Local, representing fifty dairy farmers, members of the Inter-State Milk Producers Association, in meeting assembled at Lyons, Berks county, Pa., do most emphatically protest against the passage of the bills before the Legislature enforcing daylight saving.

If these bills become a law they would be a hardship and a detriment to the farmers and we as farmers of this nation, producing food for the nation, should be considered in the framing of such laws.

We also urge the support of every legislator in favor of House Bill No. 497, fixing standards for condensed and evaporated milk and prohibiting the manufacture and sale of milk and milk products from which the cream has been skimmed and vegetable oils substituted.

Harry V. Schaeffer,
Secretary of Lyons Local

Feb. 24, 1921.

COME TO THE BULL SALE Thursday, March 17th, 1921

WINTERTHUR FARMS

Will Sell at Public Auction

42 REGISTERED HOLSTEIN BULLS
13 READY FOR LIGHT SERVICE

35 out of dams that have completed semi-official records, or that are now making such records

4 have Dams with over 900 Butter, 20,000 Milk
2 others with over 890 Butter, 24,000 Milk
7 others with over 700 Butter, 15,000 Milk

13 ARE Sired BY KING OF THE ORMSBYS

APPROVED NOTES ACCEPTED for any bull purchased if satisfactory arrangements are made beforehand

LOCATION

WINTERTHUR FARMS are located six miles north of Wilmington on the Kennett Pike. Automobiles will meet trains in Wilmington the morning of sale

WRITE FOR CATALOG

SALE STARTS 12.30 P. M. LUNCH SERVED 11.30 A. M.

WINTERTHUR FARMS, Winterthur, Delaware

FEDERAL ACCREDITED HERD

Auctioneer—Col. George W. Baxter, Elmira, N.Y.

HOLSTEIN AUCTION

Linside Farms and Personal Property Are Sold; the
Great Breeding Herd Must Be Disbursed

100 HEAD

Federal Tested 60-Day Retest Privilege

Friday, Mar. 18, 1921, at 10 A. M. Sharp

This is recognized as one of the finest large herds of the state; have been carefully bred for fifteen years from 30-lb. bulls and A. R. O. dams—Korndyke, Pontiacs, and Rag Apple families; Rag Apple Korndyke 20th 204631, sired by Rag Apple Korndyke with 51 A. R. O. daughters up to 37 lbs., and whose dam is the 30-lb. show cow, "Mutual De Kol," with 2 A. R. O. daughters, is now in active service, having some fine calves under six months and many females bred to him; two year old and yearling heifers by 30-lb. bulls. The entire breeding herd with records up to 27½ lbs. Further information and catalogue, address.

W. B. WICKERSHAM, Embreeville, Chester Co., Pa. 10 miles west of West Chester.
S. T. Wood, Liverpool, N. Y., Sale Director; B. V. Kelley, Syracuse, N. Y., G. W. Baxter, Elmira, N. Y., Auctioneers.

FOR SALE

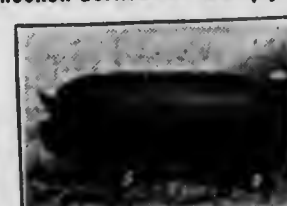
REGISTERED HOLSTEIN BULL CALVES

From Dams with Large Cow Testing Records and from a Sire whose two nearest Dams, as Heifers, averaged 23264 lbs. Milk and 1003 lbs. Butter in 365 Days

L. V. OTTO BOILING SPRINGS FARM CARLISLE, PA., R. 6

ARE YOU GOOD AT FIGURES?

Lingohocken Berkshires Multiply Rapidly



Government experts estimate 16.5% less hogs on farms than one year ago

Order a Brood Sow Now for Fall Delivery

F. M. TWINING
Pineville, Bucks Co., Penna.

HOLSTEIN FRESIAN CATTLE

Young Stock of either Sex
Always for Sale
Herd Under Federal Inspection
Free from Disease

William S. Ker, Carlisle, Pa., R. 9

E. NEWLIN BROWN

Live Stock

Auctioneer

WYCOMBE, BUCKS CO., PA.

Sales Anywhere—Anytime

MILK

From Pure-bred or Grade
Guernseys

Sells for from 3 to 4 cents per quart more than does market milk.

For Reg. Bull Calves at moderate prices, well bred, from an Accredited Herd

Address E. T. GILL

Haddon Farms HADDONFIELD, N. J.

FOR SALE

Registered Chester White Swine, Buff Leghorn Hatching Eggs, \$2 per 15, \$8 per 100; Cockerels and Hens. 10 per cent deductions to all Inter-State Milk Members

John C. Sutton Blacks, Md.



Improve Milk Quality

Cool and aerate milk at one time—halt germ growth—remove odors. **GENUINE IMPROVED CHAMPION** stops waste and loss—saves its cost in one week. Write for Free Folder. **CHAMPION MILK COOLER CO.** Dept. 22 Cortland, N. Y.

THE HOLSTEIN CLASSIC OF 1921

Second Brentwood National SALE AND EXHIBITION

Commercial Museum, Philadelphia
(34th Below Spruce)

March 28, 29, 30 and 31

EXHIBITION MARCH 28

18 Wonderful
Bulls

160 Superb
Females

Selected from the Leading Herds of United States and Canada

THE BULL ENTRIES INCLUDE A SON OF SEGIS PIETERTJE PROSPECT, world's champion milk cow for yearly production (37,384 lbs. milk, 1445 lbs. butter in one year). A son of CARNATION KING SYLVIA, the \$106,000 bull, from a 32-lb. dam, two SONS OF CHAMPION ECHO SYLVIA PONTIAC (best son of the great MAY ECHO SYLVIA, only cow to produce 1000 lbs. milk in 7 days). One of these sons is from a 37-lb. dam which has two other records of 32 and 33 lbs. and her dam is a twice 37-lb. cow. TWO SONS OF KING OF THE ORMSBYS, one from a 31-lb. dam. A SON OF KING VALDESSA PONTIAC from a show cow with over 1200 lbs. butter in her present daughters over 1000 lbs. butter) from a 35-lb. granddaughter Pontiac Korndyke. Two sons of SADIE GEIBEN HENGERVELD DEKOL, Korndyke. A son of the WORLD'S RECORD YEARLING HEIFER, (627 lbs. milk in 7 days, 23,100 lbs. in a year). A yearling son of CHIMACUM SPRING FARM KING PONTIAC (21 ARO daughters with 2-year-old records as high as 900 lbs. butter, 23,000 lbs. milk.) This young bull's dam made 21,567 lbs. milk, 904 lbs. butter as a 2-year-old and has recently completed a second record of 1047 lbs. butter. TWO RICHLY BRED PROVEN SIREs, both with a splendid list of ARO daughters and both in their prime.

The list of females to be sold in this great sale include:

Daughters of CARNATION KING SYLVIA, ORMSBY KORNDYKE LAD, MATADOR SEGIS WALKER, CHAMPION ECHO SYLVIA PONTIAC, KORNDYKE ABBEKERK, KING OF THE ORMSBYS, SPRING FARM KING, KING KORNDYKE SADIE VALE, KING SADIE VALE HENGERVELD, KING WALKER JOHANNA LAD, KING SEGIS PONTIAC KONIGEN, KING LYONS, COLANTHA JOHANNA LAD 8TH, DUTCHLAND CREAMELLE KORNDYKE LAD, KING MODEL, TIDY ABBEKERK KING, SIR AGGIE MEAD DEKOL, KING SEGIS ALCARTRA SPOFFORD, FINDERNE KING FAYNE SEGIS, and other noted bulls.

Cows and heifers in calf to the greatest sires of the breed. World's record yearling heifer. Blue ribbon cows and heifers. Some with official records as high as 40 lbs. butter in 7 days. Many with records from 25 to over 30 lbs. in 7 days and from 900 to 1200 lbs. in a year. Wonderful foundation animals with splendid records and unapproachable backing. AND EVERY ONE A FIRST CLASS INDIVIDUAL.

Sale opens each day positively at 9.45 A. M. sharp

Auctioneers Pedigree Expert Judge
GEO. W. BAXTER S. T. WOOD W. S. MOSCRIPT
GEO. A. GUE

Sale Headquarters—Bellevue-Stratford

NOTE—To reach Commercial Museum from hotel, take car 13 on Walnut Street, get off 34th and Woodland Ave., walk two squares south.

Exhibition Day, March 28th

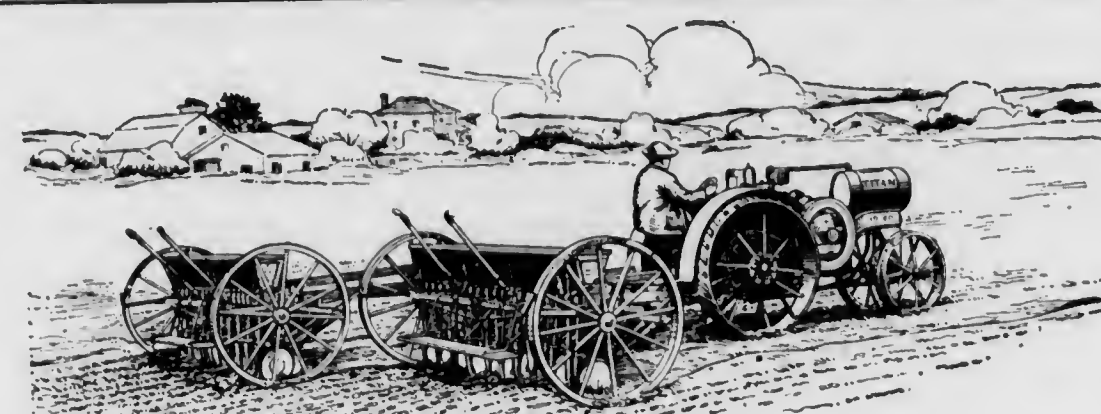
\$1000 for the Best Female, any Age \$1600 Additional Prizes in Various Classes
Given by the Corn Exchange Bank, Philadelphia

Owner
W. G. Davidson Brentwood Farm Abington, Pa.

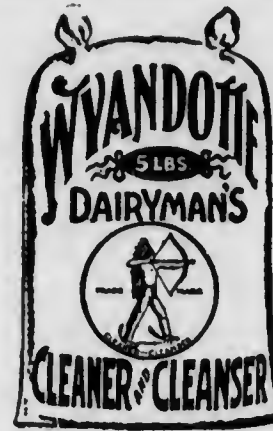
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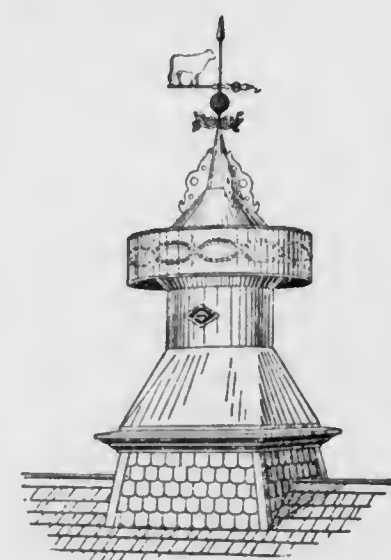
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Milk Producers Review

ISSUED MONTHLY IN THE INTEREST OF THE DAIRY FARMER BY THE INTER-STATE MILK PRODUCERS ASSOCIATION, Inc.

VOLUME I

WEST CHESTER, PA., AND PHILADELPHIA, PA., APRIL, 1921

NUMBER 12

MARCH MILK CONDITIONS

MARKET SPOTTY AND WEAK

The market during the month has been very spotty. The supply of milk coming to the large centers has been greater than could be freely absorbed and surplus in dealers hands has been increasing.

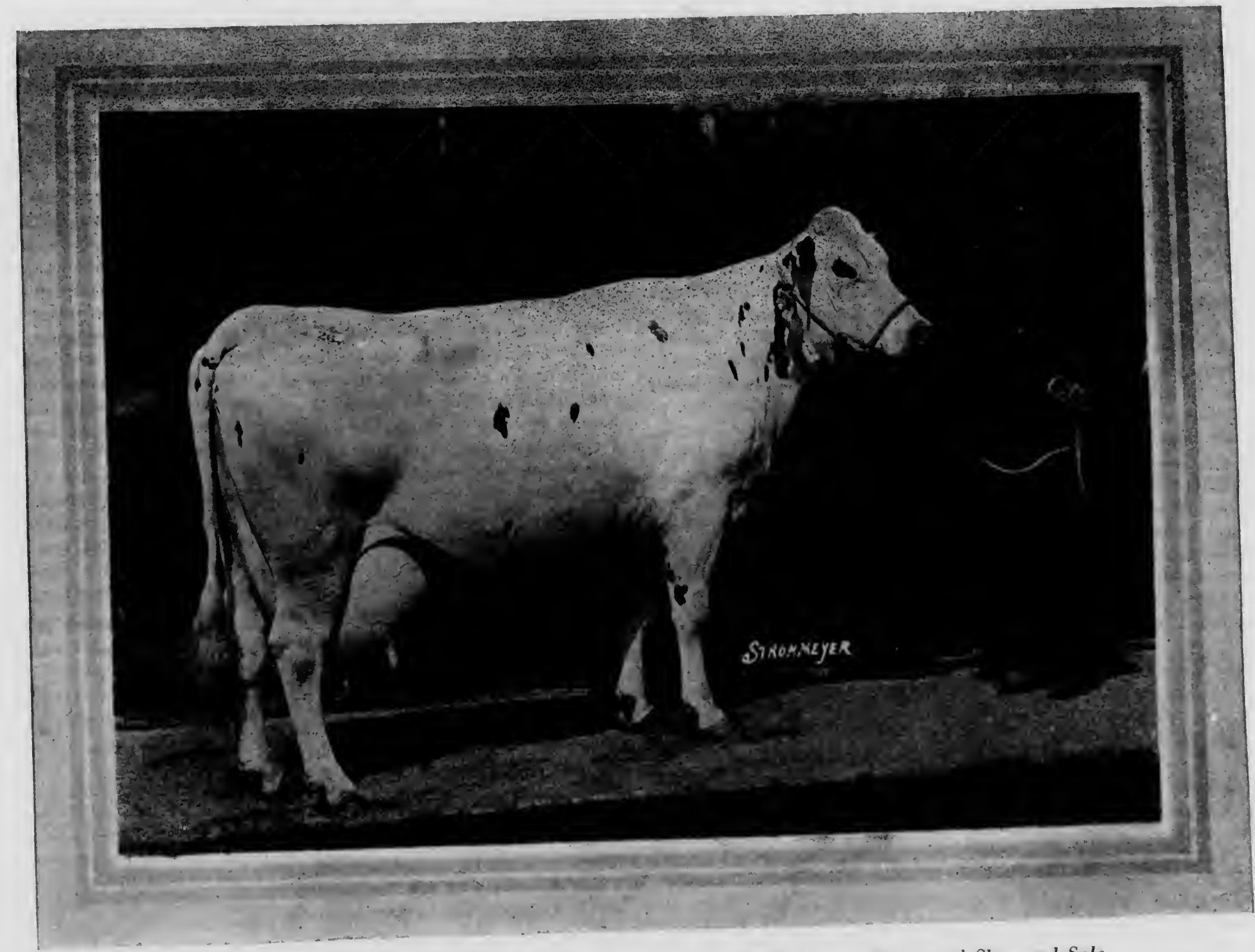
that the surplus plan is in effect in this territory.

The direct shipped market has been in worse shape than in any time since 1917. There has been a constant over supply. A considerable share of the "platform

THE AGRICULTURAL SITUATION

By HENRY C. WALLACE, Secretary of Agriculture

Let me speak first of the agricultural situation in general. I think if we can get an understanding of this, the proper work of the Department of Agriculture will become apparent. We must approach it from two angles, first, present severe financial losses Farmers throughout the nation, especially those in the South and West, are experiencing exactly the same trouble. The cotton farmers of the South, the rice farmers, the cattle and sheep growers of the far



GERTRUDE TITANIC DeKOL—First Prize Cow—any age—Second Annual Brentwood Show and Sale and her new owner, Carl Schmidt, Trenton, N. J. See page 16

Production has held up better than was expected, even with a decreased number of cows in some herds. Open weather conditions and the advanced spring have been favorable to production. Producers who had little or no milk during the early winter are beginning to increase shipments as cows come in and at times the market has been flooded. The market on the whole is distinctly a buyers market. Dealers in view of the supply have been more critical in their demands for good, clean, sweet milk and once a producer falls down on quality there is considerable difficulty in finding a new market for the milk.

Offerings of cheap milk from distant points continues plentiful. The only thing that keeps it out is the fact that there has been a plentiful supply and

milk goes to the smaller dealer, who finds his market among the working classes curtailed, owing to their decreased earning power since the war. In many cases farmers have increased their herds and are shipping more milk than they did in previous years. Some of the smaller dealers have been laying off dairies owing to the over supply and also from the fact that non-members, have, in instances, offered and sold their milk at reduced prices. Dealers in accord with this organization have laid off but few members milk. Platform prices of surplus milk have been weak all through March, ranging in price from seven down to six cents a quart.

The consumption of milk on the whole is about the same as in the preceding month. Generally speaking it is lower

(Continued on page 11)

conditions, which are decidedly unusual, and second, conditions which may develop in the future.

I doubt whether the people of the East realize just what has happened to the farmers of the producing sections. Take the grain and live-stock producing country of the Central West, for example, and I speak of this because it is the region with which I am most familiar and also because it is the region which gives us our great surplus crops. We have the finest rural civilization, taken as a whole, the world has ever seen; our farmers average very high in intelligence; they produce more per man than almost any other farmers in the world; they have adopted the most advanced system of extensive farming yet developed. Notwithstanding all this they are now in a most trying period and are suffering

West, the fruit growers; all are passing through this same valley of discouragement and financial stress.

People who are not familiar with agriculture find it hard to understand the situation. They refuse to believe that the depression is as serious as it really is. They point to the high value of our land, to the high prices at which farm products were selling prior to this heavy drop, to the large number of automobiles owned by farmers, to the apparent wealth and comfort on every side; and they refuse to take seriously what the farmers say concerning their troubles.

There are two causes for this widespread agricultural depression. One is the high cost of production last year. If we include all the factors which properly enter into the cost of production, we

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SALES OF MILK SUBSTITUTES

Extracts From a Brief on the Marketing and Sale of Coconut Oil Compounds by A. A. Miller

For several years imitations or substitutes for evaporated milk in bulk or in small packages for home consumption have been manufactured and placed on the market in Pennsylvania, New Jersey and in other states.

In general, these substitutes, imitations or compounds are manufactured by taking the butterfat from whole cow's milk and substituting therefore coconut or similar vegetable fats or oils and evaporating the same to approximately one-half its bulk. Among these compounds or substitutes which are freely marketed in Pennsylvania and New Jersey are the following:

Hebe, manufactured by the Hebe Company, Chicago, Ill., and Seattle, Wash.

Caroline, manufactured by the Caroline Company, Inc., Chicago, Ill.

Enzo, manufactured by the Enzo Company, Sheboygan, Wis.

Nyco, manufactured by the Universal Milk Company, New York, U. S. A.

Nutro, manufactured by the Indiana Condensed Milk Company, Indianapolis, Ind.

Silver Key, manufactured by the Interstate Milk Products Company, Madison, Wis.

All of these substitutes are labeled as compounds and in one case, Caroline has been specifically labeled as an imitation milk.

They are also, in instances, extensively advertised in various journals, including those of interest to housewives and mothers. The use of these substitutes is recommended by some manufacturers for caramel float, cup custards, cake filling, rice pudding, tapioca custard, oyster soup, mashed potatoes, creamed cauliflower, creamed gravies, etc. Serve with coffee, tea or in milk. In fact where evaporated or condensed milk is used, this substitute, lacking the food value of whole or condensed milk, is recommended for use.

While these substitutes or compounds are in the nature of a food and have some value in the elements of nutrition, the danger in their general sale lies in the fact that they do not contain any proportion of the elements necessary for healthy growth, particularly in the case of infants and children, as has been established by eminent authorities, and that their sale as substitutes for condensed whole milk, which does contain these necessary elements, has been established by surveys in various parts of Pennsylvania and New Jersey.

Dr. E. V. McCollum, Professor of Chemical Hygiene of the School of Hygiene and Public Health, Johns Hopkins University, Baltimore, Md., has established that these substitutes or compounds lack any appreciable quantity of the food elements contained in butterfat or whole milk, the principal source of the vitamins and particularly "Fat Soluble A", which has been shown to be absolutely necessary for healthy growth, particularly in infants and children.

"This practice of substituting vegetable fats for butterfat in milk, he says, 'has become a wide-spread evil within recent years and has far-reaching consequences. The practice should be combated by every possible means, because of the inferiority of such vegetable fats, from the nutritive standpoint, to butterfat.'

"In 1913, I was able to demonstrate by experiments on animals that butterfat contains a substance which is essential for growth or for the maintenance of normal health in the adult. This substance is not found in adequate amounts in any of the cereal grains, peas, beans, potatoes, sweet potatoes and other seed, tuber and root vegetables which form so large a part of our diet. The only practical source of it in the nutrition of young children and infants is the fat of the milk which they consume. If by chance the milk used for feeding infants or children is deprived of its fat and inferior type of fat substituted, disastrous results are certain to follow if the food is thus made faulty for any appreciable length of time."

"I have studied very carefully both by means of animal experiments and with human subjects and through a careful study of the effects of restricted diets on man, in different parts of the world, and am convinced that the use of liberal amounts of milk and other dairy products form a factor in our nutrition which is of greater importance than any similar fraction of the diet derived from other sources. This is true because milk, especially because of the peculiar nature of its fats, furnishes an indispensable dietary factor not abundant in any of the ordinary cheaper foods. I have become strenuously opposed to permitting the sale of skimmed milk with which has been incorporated vegetable fats in place of its original butterfat content, for such milk imitations are inferior to whole milk. I regard the sale of such products as nothing less than trafficking in infant life for it has been shown by a number of investigations that such products are actually, whether intended by the manufacturers or not, sold for the feeding of infants in some instances."

"Any legislation permitting the substitution of vegetable fats for milk fats in any human food should be vigorously contested and opposed by everyone interested in human welfare, which would enable anyone to sell or use vegetable fats as human food, in association with dairy products or in forms liable to come into competition with them."

Dr. Lyman, of the Ohio State University, in experiments conducted on the growth promoting qualities of Hebe, in connection with the suit of the Hebe Company vs. the State of Ohio, to set aside the interpretation of Section 12725 of the General Code of Ohio, forbidding the sale of condensed skim milk in that State, found that the amount of these vitamins or growth producing elements was trivial. In his experiments mice weighing 25 grams each, when the experiment started, were used. In four weeks those that had been fed with Hebe in the ration weighed 42 grams, while those whose diet included condensed milk attained the weight of 220 grams. The growth from those fed Hebe was attributed to the fact that the skimmed milk retained enough butter fat to produce a slight growth. Experiments with coconut oil alone showed no growth whatever.

In every case where mice and guinea pigs were taken from their mothers after birth and fed on coconut oil and materials containing "Water Soluble Vitamin A",

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OUR UNITED PURPOSE FOR AGRICULTURE

By MILO D. CAMPBELL
Pres. National Milk Producers Federation

American agriculture at this hour is in the slough of despondency and with but slight encouragement, other than benevolent words from Congress and the powers in charge of our governmental affairs.

But amidst the gloom that hangs over the seven million farms of the nation, there is no sign of bolshevism, no red flags, no demand for the soviet, there is nothing but the patriotism that grows pure bred in the open country and that alone can preserve this nation from the doctrines of communism and socialism in the coming days, possibly not far away.

All history has written the formula that nations themselves perish with their decadent agriculture.

Over in Europe there is being organized what is known as the "Green Internationalists" with purpose to fight bolshevism.

Its membership consists already of millions of farmers. Over here such an organization or pledge of fealty is unnecessary. Out in the country we do not know or grow bolshevists, we do not furnish the bandits, bank robbers, murderers and criminals that are terrorizing the nation with crime.

Farmers a Part of Republic

But along with our love of country and of her institutions, we are beginning to have a consciousness that we are a part of the republic and entitled to our share of representations, and to equality of rights in the affairs of state.

More than one-third of the nation consists of food producers. Without them the people of the cities would starve and without them the landmarks of constitutional government would soon be obliterated.

And yet this army of protectors finds in Washington out of five hundred and thirty Senators and Representatives, less than a dozen from their calling. Every other business and profession is well represented in legislative and administrative departments but the farm.

During the last session of Congress there have been thousands of pages in the Congressional Record devoted to condolences, to eulogies of the farmer, to prepared epitaphs for the tombstone over his dying hopes, and not five lines of legislation have been written for his relief.

We are lured by the promises of political parties before election, when they tell of the things they will do for us when power is given them; but stones instead of bread, are hardening our hearts.

We do not doubt the sincerity of the majority of men in Congress who profess friendship for the farmer, but we are beginning to look with suspicion upon the man who deals only in soft words for the Congressional Record, and who drops monkey wrenches into the machinery from behind the scene.

The greatest camouflage arrangement that any parliamentary body of the world possesses, and through which the adroit and oily Congressman can be all things to all constituents consists of the fossilized inheritance rules, by which Senators and Congressmen retain their committee places from session to session, provided their own constituents send them back.

(Continued on page 7)

MILK PRODUCTION REVOLUTIONIZED

Again that most worthy inventor, that savior of the poor man's joys—and sometimes tribulations—Henry Ford, has come to the aid of the human as well as the bovine race.

Not satisfied with the displacement of the doughty plow horse, that friend and co-laborer of our forefathers, which in some farming districts is now becoming almost extinct and probably in the not distant future will grace, along with other prehistoric animals, only the halls of museums, this worthy inventor has launched a process for the manufacture of synthetic milk—no, the word synthetic does not stand for other class of cows, pure-bred or otherwise—but rather, under the new regulations we are to become a cowless, calfless, beefless nation.

All the work of the cow is to be mechanically manipulated. True, there is some uncertainty as to just what patents the new brand of milk is to be produced under.

From New England comes an adaption which might be termed the "wet method" in which the mash—no we do not refer to the kind that has become a priceless, (and almost nearly extinct as the cow will be) article prohibited by the Volstead Act, but one in which the grains used are to be crushed and fermented—no that's not allowed either—rather emulsified or conglomerated and from the resultant pulp a milky white fluid obtained—heretofore called cows milk.

From the Pacific Coast comes another plan which might be called the dry method. "Gale" of the Los Angeles Daily Times appears to have been let in on the secret and we reproduce here-with an idea—in the rough—which may be the way it can be done under the dry method.

We have a few suggestions, however, which may be considered in connection with the latter method. We would recommend one additional attachment, something that might be obtained at any country store, and that is a manure spreader attachment. This we believe would serve admirably, as it would permit of returning to the soil at once all the fertility after the milk had been extracted.

We understand that there is now in course of formation a syndicate to establish plants for the wet process, in the large eastern markets, where water is plentiful and abandoned breweries available. In the west where droughts are frequent the dry process will probably be the more adaptable.

With this dry process just think how much labor can be saved, as well as lumber and wire in making fences, as under this ideal production method "cow-fords" will not have to be fenced out of growing crops. These machines can be so set as to graze regularly along certain lines, so that the forage crops, etc., can be grown continuously, in other words, four cowfords of one cow power, will be able to graze per 10 acre lot and the crop catch up with each circuit of the machine. In other words, each 10 acre lot planted in cowfordgrass will produce just so many cans of condensed milk per hour. All that will be necessary for the dairyman will be to pick up the milk—already canned—as he does potatoes and haul them to the market.

Of course we won't need any butter, butter milk, cheese or any other dairy products under the new system. Each farm will grow a crop of coconuts, so that oleomargarine could be made for butter substitute and probably a cheese attachment might be added to the machine or it might be possible to have an attachment for sucking pigs or a skin milk feeder for chickens.

At the end of the first three months of its existence, activities of the council stand out prominently in several directions.

The work groups itself rather definitely in three general classes, investigation, education and legislation.

The investigational activities have been carried on in co-operation with various departments of health, departments

These classes are probably the most extensive under observation that have been carried on in this country and it is expected that the work will be taken up on even a broader scale next year. The dietary habits formed in youth are bound to be retained through life, so that if the child knows, by actual experience, the importance of milk in the diet, this knowledge will be maintained and followed through their later life.

Educational Activities

Speakers from our bureau are talking before groups of mothers and women's clubs, in public and private schools, settlement houses, etc. In short, they are reaching the consumer direct at every point and whenever an opportunity is presented, Miss Darger and Dr. Hannah Lyons, together with Miss Louise Fitzgerald of the National Dairy Council, have been active in the work.

Miss Hilda Kushman, of the National Dairy Council, is now training Philadelphia school children in the production of "The Milk Fairy." This playlet is a very important factor in interesting children in the greater use of milk in the diet. Children love dramatics—to dress up. All the parts are taken by the children. Those attending neighborhood schools are invited to attend the performances, so that the influence is greatly broadened.

At Trenton N. J., the play resulted in increasing the interest of the people generally on the subject of proper nutrition for children.

Several hundred lantern slides are being constantly used to illustrate various talks and lectures. In addition to the milk film "The Fountain of Youth" of which four copies are being shown in various moving picture houses. A new film "The Romance of the White Bottle" has recently been acquired.

Literature

Thousands of pieces of literature are being distributed each week, showing the value of milk as a food and in comparison with other food elements. Several additional pamphlets are in preparation.

Legislation Activities

The council has been actively supporting measures introduced in Pennsylvania and New Jersey prohibiting the manufacture and sale of compounds of skimmed milk and coconut oil. It was opposed to the Daylight-saving bill introduced in both Pennsylvania and New Jersey. In the former case it aided in bringing about the defeat of the bill.

The proposed Pennsylvania State Board of Health Bill, fixing sanitary standards for milk was under conference for several months and it was decided that any definite advanced legislation was unwise without further definite conferences and a greater unanimity of opinion on the part of both dairymen and consumers. The council has also supported the New Jersey bill for fixing a straight butterfat content standard for ice cream.

Future Plans

Arrangements are being made with state extension departments looking toward definite work in the various counties to help the farmers to produce cleaner and safer milk, practically without additional expense to them. These

(Continued on page 14)

INTERSTATE DAIRY COUNCIL ACTIVITIES DURING MONTH

Do We Hear a Horse-Laugh?



"Gale" in Los Angeles "Daily Times"

One can never tell how far these inventions can be made to go—just like the "Fords" for which as many attachments can be found as flies around a swill barrel.

TEST SEED CORN

All seed corn should be tested for spring planting. Now is a good time to make the test. The most satisfactory way is to test four to six kernels from each ear. The requirements for germination are moisture, warmth and air. The ordinary temperature of the living warm is about right if it does not go below 50 at night. A shallow box filled with wet sand and marked off into numbered squares with twine makes a good germinator. The county agent will give further details.

of education, health councils and tuberculosis committees. Through this co-operation we are obtaining valuable information showing the value of milk in the diet of children. In Philadelphia we have probably the largest demonstration. In that city many hundreds of children are being weighed and classified as to their normality. In one school, much to the surprise of the authorities eighteen per cent. of those attending were found to be 10 per cent. under weight and in this school it was necessary to increase the standard to 13% below normal, which was seven per cent. of the attendance. These children are grouped in special classes and fed from a pint to a quart of milk a day. Careful records are kept in each case and gains or losses carefully noted and tabulated.

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Editorial

Progress along the lines of readjustment moves slowly. It took some time to reach the peak of war time prices and it will take a longer time to reach a post war business level.

The farmer has and is taking his jolts and things begin to look a little more favorable. There have been reductions in feeds for cattle. Fertilizers in instances are lower. Decreases amounting to approximately 15% have been made in many agricultural implements. All of this is a move in the right direction. Some were pretty hard to start but now that they have got going we trust that they will reach a level somewhat in proportion to the declines in other lines.

No doubt the farmer has a better show than was apparent a few months ago—and he needed it.

There are other lines, however, in which the farmer needs just as much protection. Competition of foreign farm products is cutting a big figure in the prices obtained for some products.

Since January, importations of butter from Denmark and Argentina aggregated some 9,600,000 pounds; Canadian wheat was dumped on the market not long ago; vegetable oils entering into oleomargarine manufacture and now very extensively in milk products are a factor. The only way we can get protection from this competition is by laying tariffs that will protect the American farmer. See it that Congress takes action on these matters. Indications are that the recent Fordney bill will be enacted at the coming extra session of Congress as a temporary tariff measure, pending an inquiry for the preparation of a new tariff bill.

There are many other matters of national interest to the farmer. Get together, present a united front on these matters and everyone do their part. Early in April there will be a gathering in Washington, D. C. of many of the various farm and dairy organizations. No stone should be left unturned that would enable these organizations to work co-operatively on matters of national importance and to present one solid united front for legislation in the interest of agriculture in all its branches.

FARMERS COME FIRST

That which was first is to be last. The tax revision bill, originally scheduled for first consideration in the special session of Congress has been shifted down the list and will now come last on the program. The farmer gets first call. He is to have his innings before the revenue producers. He takes precedence over the much-talked-of permanent tariff bill and the anti-dumping measures.

The Fordney emergency tariff measure will be picked up again, and the plan is to rush it through both houses. Vetted by President Wilson, it failed of passage over the presidential disapproval. The men who have been urging a straight-out fanged and taloned import embargo on farm commodities are satisfied with it. The schedules are so high that they constitute a virtual embargo any way.

The Middle West wants the wheat and corn schedules. The South insists upon the cotton rates. Wisconsin, northern Illinois, the dairying regions of New York and other eastern regions are keenly concerned as to high rates on dairy products. California and Florida have been disturbed over low priced citrus fruits. Steer feeders in the corn belt and the range cattlemen of Texas, Montana and Wyoming are suffering over the menace of South American meats and hides. The sheep country apprehends further trouble from the wools of Australia and the frozen muttons of New Zealand. The main fears of the farmer in all parts of the country have been covered. Given a tariff that will shut out Chinese eggs and oriental oils, and the farmer has little more to ask.

It is a tariff that, defective as it may be from the scientific tariff stand, that pleases the interests for which it was hurriedly drawn. Back of it the members of Congress from the West and the South can get together. And it will pick up a lot of scattered support in the East and the North wherever a congressman comes from an agricultural district. There is nothing in the composition of the new Congress that pretends much trouble for it.

The decision to act first upon the agricultural tariff serves to emphasize the unsatisfactory and even desperate condition of American agriculture in all parts of the country. It was no lightly made decision that deferred action on the tax revision bill in favor of the farm. —Reprinted from editorial, Philadelphia Public Ledger.

Care of milk means much at this season of the year. We are in the time of changeable weather conditions and a little carelessness quite liable to mean sour milk, which is just so much loss. Be more particular than ever at this time of the year in reference to the cooling of your milk. When the weather is hot, we cool it of course, but some are apt to take a chance at this season of the year.

Again we must guard against undesirable odors in the milk, more particularly now that cows get a chance at a little pasture. Consumers don't like and won't buy grassy and garlicky milk. Some dealers, as printed elsewhere in this issue, are warning their producers against these undesirable odors, as well as sour and unclean milk.

If we expect a good market for our product we must offer it in a condition suitable to the consumer.

You can't be too careful in these days of a buyers market, how you prepare your milk. Milk poorly prepared will not show a profit on the right side at the end of the season.

That buyers of market milk are going to be more insistent on the quality of the milk they buy this spring is evident from an announcement made by one of the large dealers of Philadelphia, which is printed elsewhere in this issue. An observation of the precautions recommended will save dairy farmers from loss of milk.

In order to avoid certain odors of grass and garlic, cows should not be left on early pasture but a few hours a day, say not after ten o'clock in the morning for the first week and the time thereafter gradually increased.

BALTIMORE MILK MARKET

There will be no change in the price of milk in the Baltimore Market during April. There is still a surplus on the market and it has been necessary to handle about 600 gallons per day through a "surplus and by-product plant." Frequently a large amount of this milk is sold to small dealers at the regular price, the balance is separated and the cream sold for butter or ice cream making.

A committee on "undesirable milk" and "individual limitation of production" has recommended that undesirable shippers be notified by the dealer to whom he is shipping that unless an improvement is made in his shipments his milk would be discontinued. A copy of this notice is to be sent to the Maryland State Dairyman's Association and a man is to be sent to the farm to help locate the trouble and help the farmer remedy it.

It was further recommended that a dealer could limit each shipper, if he so desired, to 30 per cent. increase over his fall average, that is on the amount shipped during September, October, November and December.

Having milk delivered in the different schools is now a reality in Baltimore. About 1600 gallons daily is being consumed by the school children during school hours. This has been a decided success and we believe that milk will soon be sold in every school house in Baltimore City.

D. G. Harry,

President Maryland State Dairyman's Association.

CASE DISMISSED

The case against the Louisiana Dairy-men's Co-operative Association, New Orleans, La., which had been indicted under Sherman Anti-Trust Act, the first action to have been made against co-operative dairying associations, under Federal law, has collapsed.

On hearing the demurrer against the indictment, argued by Edgar M. Cahn, Esq., counsellor for the Louisiana Dairy-men's Association, the judge maintained the demurrer, dismissed the indictment and discharged the accused.

The outcome of this case has been keenly observed by the officers and officials of the various milk producers organizations and there is general gratification over the outcome in this particular case, which involved a controversy of wide-spread importance to organizations of milk producers throughout the country.

J. H. Knobe, former county agent in Cecil county, Md., takes up his duties this week in Franklin county. He is a graduate of the University of Maryland and the second man who is not a Penn State graduate to become a county agent in Pennsylvania.

The National Dairy Show of 1921 will be held at the Minnesota State Fair grounds, October 8th to 15th inclusive.

SKIM MILK MAKES FINE RATION FOR DAIRY PURPOSE

Record of Stock Shows Such Feed Produces Rapid Growth Both For Pigs and Calves

By M. H. Farr

It is an established fact that dairying communities are prosperous and progressive. The weekly or monthly cream check provides a steady income. There are also other features of dairying that while of indirect value amount to considerable in a few months time. Skim milk is a wonderful help to build up the "balanced ration" recommended by all livestock authorities.

Tale of Two Pigs

Two pigs taken from the same litter, equally thrifty, and weighing 30 pounds apiece when weaned, were used in a feeding experiment covering 100 days at the Wisconsin Experiment Station at Madison.

One pig was fed 250 pounds of a ration composed of corn and gluten. A part of the ration was wasted due to lack of appetite. At the end of 100 days this pig weighed 55 pounds—a gain of 25 pounds. Growing pigs need good protein and ash to develop properly. Corn and gluten fed alone do not make a balanced ration.

The other pig received 216 pounds of corn and 270 pounds of skim milk. This pig had a good appetite and wasted no food. At the end of 100 days it weighed 165 pounds—a gain of 135 pounds. The ration it received was a balanced one. It contained more protein and plenty of ash. Skim milk is a wonderful food to stimulate the growth of young animals and keep them thrifty. Feed it to calves—they will grow faster. Feed it to chickens—they will lay better. Selling butterfat and feeding skim milk keeps the fertility on the farm, and your land grows better every year.

With the Calves

Purdue, Indiana, Agricultural College fed 3 lots of 10 calves each for six months. One lot was fed skim milk, one lot a home mixed calf meal, and the third, an extensively advertised calf meal. All received the same care and other feeds, grain, hay, etc.

Lot 1 fed skim milk weighed an average of 62 pounds at birth, and made an average of 221 pounds in the 180 days at a cost per pound of gain of 5.7 cents or a total cost of \$12.60.

Lot 2 fed home mixed meal weighed an average of 69 pounds at birth, and made an average gain of 175 pounds each in the 180 days, at a cost per pound of gain of 7.4 cents or a total cost of \$12.95.

Lot 3, fed the commercial meal weighed an average of 68 pounds at birth and made an average gain of 134 pounds in the 185 days at a cost per pound of gain of 13.1 cents or a total cost of \$17.44.

The moral of this story is "Save the skim milk" and a good cream separator provides a means of furnishing it sweet and with the animal heat still in it—the best condition for feeding. At the same time it will save all the butterfat.

COWFORDISM

Mr. Wit—The latest cars must have condensed milk in their radiators.

Mr. Slow—Not really?

Mr. Wit—Well, here's the advertisement in the newspaper: On a farm, wanted, a young man to milk and drive an up-to-date car.—London Answers.

LATEST MARKET PRICES

March Milk Prices

The Basic and Surplus Plan of Purchasing milk in the Philadelphia territory again became effective with January. Under this plan the average quantity of milk shipped during October, November and December, 1920, is taken as the "basic quantity" and is paid for at the basic price named. All milk in excess of the basic quantity will be paid for on the basis of 92 score solid packed creamery butter New York City, plus 20 per cent.

Producers changing from one buyer to another after January 1st, are considered as having forfeited their basic standard and when taken on by other buyers are rated at a 50 per cent. basic and 50 per cent. surplus basis. Prices subject to change whenever warranted by market conditions.

F. O. B. Philadelphia
From these prices one cent per 46 quarts (or one cent per 100 pounds) is to be deducted by the buyer, which together with one cent per 46 quarts, contributed by the buyer, is to be turned over to the treasurer of the Inter-State Dairy Council for the purpose of carrying on a publicity campaign, advertising the food value and greater consumption of dairy products. The usual commission from the members of the Inter-State Milk Producers Association is heretofore, and returned to the Association as heretofore.

Basic Price for all milk except creamery butter

These prices are based on 120 per cent. of the average monthly or semi-monthly price of solid packed 92 score creamery butter, New York City. In May, June and July an increase of 10 per cent., and in August an increase of 5 per cent. in the basic quantity of milk shipped is allowed.

APRIL COMPARATIVE PRICES
PAID PRODUCERS FOR MARKET MILK Eastern Territory

4 per cent. butterfat, per 100 pounds Philadelphia, 50 mile zone \$3.05
New York, 200 mile zone 2.50
Pittsburgh, outlying points 2.50
Baltimore, per gallon f. o. b. \$0.30 \$0.20

CURRENT RETAIL MILK PRICES Pasteurized and bottled

Subject to Board of Health Regulations Grade B or Market Milk

MONTHLY PRICES OF GRADE B OR MARKET MILK

F. O. B. Philadelphia and at receiving stations in the 50 mile zone at 3 per cent. butterfat. Four-tenths of a cent being added or deducted for each one-tenth per cent. fat above or below 3 per cent.

Receiving F. O. B. per station 50 mile zone per cwt.

1920 January 8.1 3.21
February 8.1 3.21
March 8.1 3.21
April 8.1 3.21
May 8.1 3.21
June 8.1 3.21
July 8.1 3.21
August 9.1 3.67
September 9.1 3.61
October 9.1 3.61
November 9.1 3.61
December 7.1 2.68

1921 January 7.1 2.68
February 7.1 2.68
March 7.1 2.68

MARCH BUTTER PRICES 92 score solid packed creamery butter cents per pound

New York Phila. Chicago
1 54 1/2 53 53 1/4
2 54 1/2 54 1/2 53
3 54 1/2 54 1/2 53
4 52 53 51
5 53 53 51 1/2
6 51 1/2 52 49
7 51 1/2 52 49
8 50 51 48
9 50 51 48 1/2
10 48 48 1/2 48
11 47 1/2 48 1/2 45 1/2
12 47 1/2 48 1/2 45 1/2
13 47 1/2 48 1/2 45 1/2
14 46 1/2 47 44 1/2
15 46 1/2 47 44 1/2
16 45 44 44 1/2
17 44 1/2 44 44 1/2
18 44 1/2 44 44 1/2
19 45 45 1/2 45 1/2
20 45 1/2 46 1/2 45 1/2
21 46 1/4 46 1/4 45 3/4
22 46 1/2 47 45 1/2
23 46 1/2 47 45 1/2
24 47 47 1/2 44 1/2
25 47 47 1/2 44 1/2
26 46 1/2 47 1/2 44 1/2
27 46 1/2 47 1/2 44 1/2
28 46 47 1/2 44 1/2
29 46 47 1/2 44 1/2
30 46 47 1/2 44 1/2
31 46 47 1/2 44 1/2

When milk is not tested the price f. o. b. Philadelphia is 8 cents per quart



The Secret of Making Your Dairy Pay

Help Your Cows Increase Your Profits

EVERY dairyman knows he can't make a profit on milk unless he feeds for it.

And unless he weighs his feed and weighs the milk from each cow he can't know the profit he makes.

Buffalo Corn Gluten Feed will greatly increase your milk yield.

Buffalo Corn Gluten Feed contains concentrated corn protein in a highly digestible form. It is used by successful dairymen all over the country.

Get a supply of Buffalo Corn Gluten Feed. Mix three parts of Buffalo Corn Gluten Feed with one part of wheat bran, or one part of ground oats and one part beet pulp.

You can mix a whole ton in a half hour—the most profitable half hour you ever spent.

Feed this mixture one pound to every three and one-half pounds of milk and see how your milk yield will jump.

After a month's trial of Buffalo Corn Gluten Feed you'll never again go back to the old methods of feeding.

Corn Products Refining Co.
New York Chicago

ASSOCIATION ACTIVITIES

The month of March has been an extremely busy one. Legislative matters have probably claimed a large share of the time of a number of the officers. The Dairymen's Bill and the bill intended to prohibit the sale of filled milk and cream, that is the substitution of coconut oil for butterfat, have been before the Legislatures of Pennsylvania and New Jersey. In the former state, we aided in having the Dairymen's Bill defeated. In New Jersey a similar bill passed the assembly but has not been acted upon in the Senate. Several hearings have been held before legislative committees both in Pennsylvania and New Jersey on the "filled milk bills." The bill in Pennsylvania passed the House of Representatives, but at this writing has not been acted upon in the Senate.

A large amount of work on these bills has been done by your officers as well as by the Pennsylvania Dairy Council. In New Jersey we have also been behind a bill fixing butterfat standards for ice cream.

Notwithstanding this work your officers have done a considerable amount of field work in connection with locals. Some fifteen meetings have been held in various parts of the territory. Conferences, in the offices of the association, have been numerous and a number of various differences between producers and dealers have been adjusted.

The official tester of the association has made numerous visits to receiving stations, as well as receiving platforms, making check tests during the month. During March 115 new members were signed up.

CLEAN DAIRY BARN

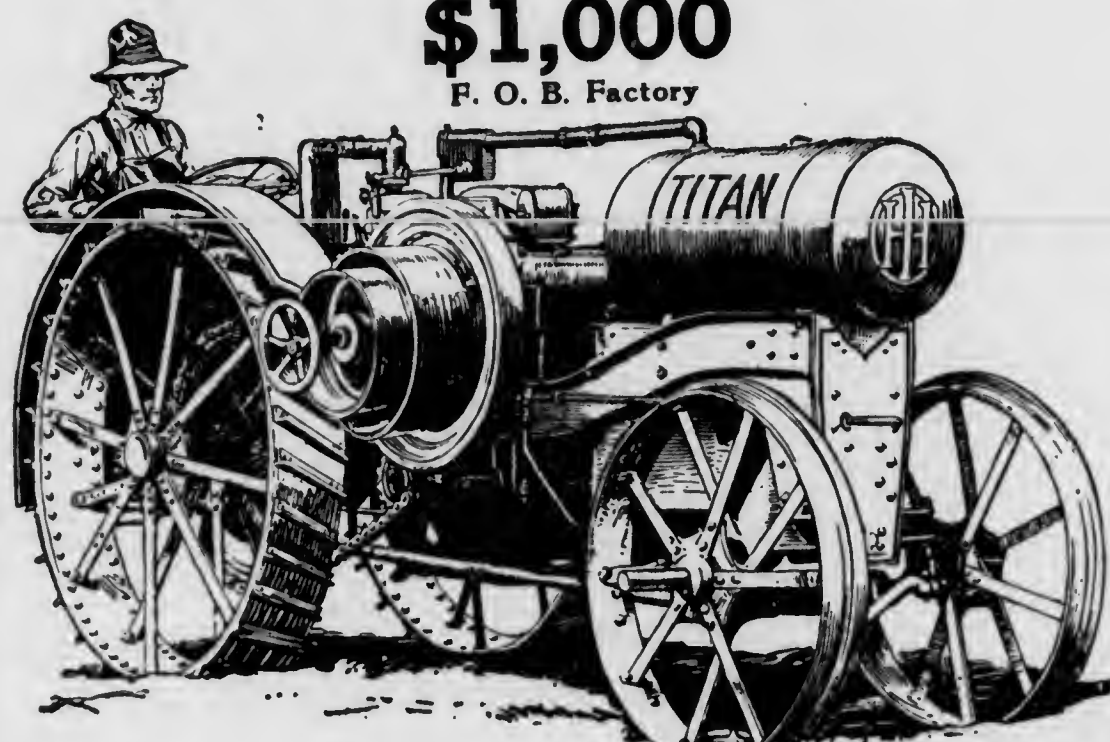
Clean dairy barns, clean cows; clean cows, clean milk; clean milk, better dairy products; better dairy products, higher prices to the producers. Remove the manure from the barn daily; keep the cows clean and well bedded. This will remove the source of much dirt in milk and make high quality production possible.—State College.

Titan Tractor

Back to the Old Price

\$1,000

F. O. B. Factory



Hard Work Made Easy With a Titan

This price includes all of the following equipment; extension angle lugs, fenders, platform, angle lugs, throttle governor, friction clutch pulley, wide range adjustable drawbar and water air cleaner.

PRICES OF OTHER LINES REDUCED
International 8-16 - \$1,000
International 15-30 - 1,950

Prices have also been reduced on chilled plows, tractor plows, cream separators, kerosene engines, feed grinders, seeding machines, International threshers, wagons, hay presses and on a number of other lines which your dealer can give you full information.

A Full Line of MOTOR TRUCKS, $\frac{3}{4}$ to 5 Tons

Write for Descriptive Folders

International Harvester Company

OF AMERICA



Philadelphia Branch, 216 N. 23rd Street
Harrisburg Branch, 813 Market Street



44 SO. QUEEN STREET

Dairymen

Here is an efficient milking machine that will milk clean and does not require stripping.

Write for prices and terms
Buckwalter Supply Co.
LANCASTER, PA.

PENNSYLVANIA STATE FAIR

Following a wide-spread demand, a bill has been introduced in the Pennsylvania State Legislature creating a commission to secure a site and establish and conduct a state fair and making an appropriation for the same. This bill, known as House Bill No. 845, provides for a commission of nine citizens, the Governor and the Secretary of Agriculture as ex-officio members, and the other seven members shall be appointed by the Governor with the advice and consent of the Senate. Three members shall be appointed for four years, two for terms of three years and two for terms of two years each.

The bill provides for the acquirement of suitable ground and the erection of buildings. This shall be done in conjunction with the Commission of Public Grounds and Buildings.

The commission is directed to hold an annual fair on such date as a majority of the members of the commission shall determine. Such fair shall embrace exhibits of all classes of farm products,

embracing live stock breeding, dairying, horticulture, manufacture and domestic arts and such other exhibits of agriculture and other industries.

All proceeds from the operation of the state fair and all appropriations made by the General Assembly from time to time to the State Fair Commission shall be set apart into a separate fund in the State Treasury, to be known as the "State Fair Fund."

The bill provides for an appropriation of \$250,000 to carry out the provision of the act.

Broadly speaking this bill provides for the establishment of a state fair along the lines of the Ohio State Fair, which has been successfully conducted upon a broad scale of betterment in the advancement of knowledge for the benefit of agriculture in general.

This is a clean cut proposition and deserves the support of every farmer.

Hearings upon the merits of the bill have been recently held and you should advise your representative to support this bill.

Mention the Review when writing advertisers

SEASONABLE MILK ODORS

Reprint of a Notice Sent to Milk Producers by a Large Philadelphia Milk Buyer

This is the season when milk will contain undesirable flavors unless great care is taken to prevent it. Practically all of those foreign flavors which are unnatural to milk under normal conditions can be avoided, thus prevent loss to the milk producer and a large amount of trouble for the milk distributor. The public will not buy milk that has a disagreeable or unpleasant flavor. You will readily see, therefore, that it is to your advantage as well as ours to prevent those flavors from getting into milk.

Grassy Flavor: Cows will soon be turned out to pasture and the early spring grass which they will find now is immature and if eaten in large quantities and the cows are kept in pasture up to milking time, a grassy flavor will result. When a radical change is made in the food of the cow, such as changing from winter foods to green grass, it takes some time for the cow's system to become adjusted to the change, and a foreign flavor in the milk is likely to follow. By changing the feed gradually and only leaving the cows in the field for a few hours at the start, this trouble is largely prevented.

Garlic Flavor: This is much more objectionable than grassy flavor and more difficult to control. In fact milk that has a strong garlic flavor is of little value for any purpose. It can, however, be largely prevented by taking the cows out of pasture in the middle of the day. It will be the policy of this company not to accept milk this season that has a distinct garlic flavor. This flavor can be eliminated to a large extent by taking the cows out of pasture five or six hours before milking.

Unclean Flavors: Warm milk will absorb any and all odors which it comes in contact with. It is very easy, therefore, to see why milk stored in an ill-smelling stable will have a "cowy" odor. If dirt or manure get into the milk the odor will be still more pronounced. Of course, it goes without saying that if the stables and cows are properly cared for these disagreeable odors will not exist. The udders and flanks of the cows should at least be wiped with a damp cloth before milking. This is a very simple precaution and should be followed by all milk producers. As a further prevention of objectionable stable odors each pail of milk should be removed from the stable immediately after it is drawn from the cow.

The condition of utensils, including milk cans, pails and strainers, has a bearing on the flavor and taints in milk. You as milk producers are duty bound to use clean utensils in the dairy business. You demand clean receptacles to be used for the foods you buy and likewise the milk-consuming public demands the same of you. Milk Pails are the first utensils to come in contact with the milk. These never leave the farm, consequently the responsibility for their cleanliness lies entirely with you. It is a common belief that the casual scalding which the milk pail receives, by means of water from the tea-kettle, will render it sterile. This is not the case. It would be necessary for scalding water to stand in the pail for a considerable length of time, or subject it to steam to make it sterile. Strainer Cloths are also a frequent source of contamination; they should be boiled each time after milking or better still thrown away, thereby relieving the housewife of that much work. Milk Cans need the same careful attention as the other utensils. Whatever cleaning is done at the milk dealer's plant, unless the cans are dry and clean, it is well to scald them on their return to the farm and turn them upside down on racks in pure air with covers removed.

Your hearty co-operation is expected and will be duly appreciated in the solution of this troublesome dairy problem.

MILK STANDARDS

IT WILL BE THE POLICY OF OUR COMPANY THIS YEAR NOT TO RECEIVE MILK OF THE FOLLOWING CHARACTER:

- 1—THAT HAS A GRASSY OR GARLIC FLAVOR
This can be prevented by taking the cows out of pasture early in the afternoon and feeding a little grain before milking. Grassy or Garlic Milk is of no value to us for any purpose.
- 2—THAT HAS A TEMPERATURE ABOVE 60°
(This means sour milk)
- 3—THAT HAS AN ACIDITY ABOVE .18 of 1%
(Such milk is nearly sour)
- 4—THAT HAS A SPECIFIC GRAVITY BELOW 100 (NEW YORK BOARD OF HEALTH) OR BELOW .029 (QUEVENNE)
- 5—THAT IS NOT CLEAN.

The Above Standards Must Be Strictly Observed

GOOD HOGS WIN FOR PENNSYLVANIA BREEDERS

The policy with respect to hog breeding, "not how many hogs, but how good," has been most successful in Pennsylvania last year. During that time twenty-eight swine breeders' organizations were perfected through the co-operation of farm bureau and field workers of the Pennsylvania State College animal husbandry extension force. There are now thirty-four such organizations in the state with a total of 423 members all working for pork improvement. During 1920 the new pure-bred hog owners invested \$5,297.50 for thirty-one outstanding boars and \$12,101.50 for 189 meritorious brood matrons. The same organization work is being carried on this year and is expected to bring many additional farmers to the point of seeing that the good hogs "bring home the bacon."

THE ANNUAL MEETING

It may be a long time before the annual meeting of the Inter-State Milk Producers Association in December, but the officers and directors are already making plans to have the next annual meeting better and of more interest and value to its members than ever before.

To make this meeting a real success, however, we must have the co-operation of the membership. Not only should the individual membership plan to attend the two days session but the various locals should plan to send their delegates.

If your local has not been particularly active, get together, have a meeting before the rush of work during the harvest season and make your plans for next fall.

Milk for Health

OUR UNITED PURPOSE FOR AGRICULTURE

(Continued from page 2)

announced that wool fabrics will remain unchanged from present prices for the season.

The great automobile concerns, farm machinery combinations and a hundred other great staple manufacturers speaking in concert voice make and announce fixed prices for months ahead.

Who is telling a single farmer in these United States what price he can have for the next crop?

Farm Paralysis Closed Factories

It is a false cry that the manufacturer has been compelled to close his factory because the foreign market has failed him.

It is because the home market has failed, and the home market will remain closed until the farmer gets money enough to open it.

The average American farmer is worth to the manufacturer as a consumer, more than two consumers from any other calling in the country, and our thirty-five millions of farmers more than any five hundred millions of foreign consumers.

Our farmers buy as much for personal needs as the city consumers, and in addition they buy lumber and nails, fencing and tools, fertilizer and equipment for seven million farms. This is the market that must be rebuilt and protected against the cheap labor of the outside world. For five years no new houses have been built in the country, no buildings painted and but few fences constructed.

Agriculture is becoming the abandoned cemetery of the nation's industries.

Protective Tariff

We are about to make a new tariff law along protective lines and whether we believe in protection or not. It will not follow the Mason and Dixon's line, but the fight promises to be hottest around New England and a few of the Eastern States.

It is there we find the self-centered manufacturer, who wants a high tariff on his wares and a low tariff on food; who wants to trade high priced stuff to other countries and take from them in return low priced food; who in other words would use the farmers of this country as trading stock for his own foreign market. He would bribe foreign countries not to place a retaliatory tariff upon products from the United States, by giving to them a free market here, for their food stuffs, even though it drive our farmers to the serfdom of European and South American countries.

We Demand the Tariff

What we demand for the farmer is a tariff upon his products equivalent to that upon manufactured goods. We ask no favoritism and will tolerate no discrimination.

Nor will we stand for a tariff upon manufactured goods, based upon a wage of fifty cents per hour, and a tariff upon farm products upon a wage of twenty cents per hour. We ask for a square deal and we are prepared to prove our case. We are through asking a protective tariff upon products of the north and free trade for the south.

We want corn and cotton, butter and rice, the products of the north and south, east and west, whether produced on the farm, from the mine, or in the factory, given protection upon the same wage basis for equal skill. We want that duty placed high enough to measure the difference between the low wage paid abroad and a good wage to our workmen. Neither

Inferior Rations Don't Pay

Many dairymen have been feeding inferior, lower-priced rations instead of Unicorn.

The few dollars saved in price were lost either by lowered milk production or increased use of feed.

Today the price of Unicorn is so low that there is no good reason for the use of an inferior, unprofitable ration.

Start a few cows on Unicorn. Compare their milk and feed records for a month with those of the previous month.

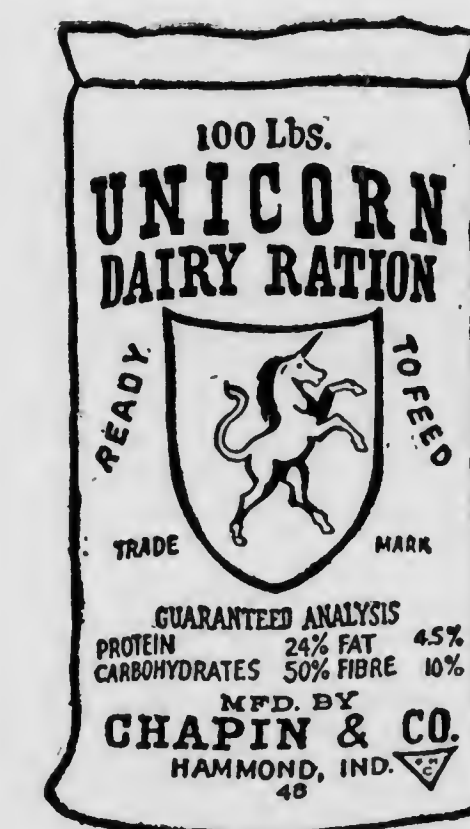
Then you will know that for thirteen years we have been telling you the truth:

"Good cows, fed Unicorn, always make a profit."

CHAPIN & COMPANY

Chicago

New England Office at Boston



Unicorn can be fed alone if your roughage is deficient in protein.

If you feed home-grown grains with Unicorn, then alfalfa or clover should make up a good part of the roughage.

DO YOU KNOW

that prices have been reduced 15% on

IRON AGE CULTIVATORS

Send for free booklet

Bateman and Companies, Inc. 347 Madison Ave. New York City



er pre-war levels or pre-war duties should be used as a guide in making a tariff schedule for agriculture.

Excess Profits and Sur Taxes

There is another purpose upon which American farmers must unite, and that purpose is the all important one of taxation. For months the great Chambers of Commerce of the United States, representing the great interests of the nation have been planning and preparing for

Congress, measures for the shifting of excess and sur taxes from the shoulders of the heavy tax payers to the shoulders of the common people.

We would greatly rejoice if the time had come when no income tax was necessary. But if an income tax is sound in principle, to abolish the excess profits tax and spread it upon the common citizen at this time, would be a crime that would invite the whirlwind of indig-

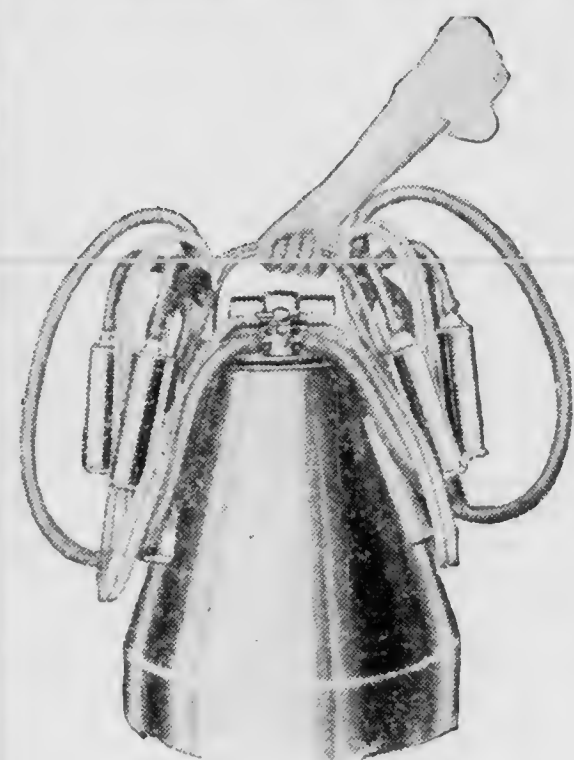
nation against those responsible for the change.

These are days of enormous profits for the few and wide-spread losses to the many. The comptroller of the currency tells that the national banks of the country made a profit of 23% last year while those of New York City made 37%.

We all know how the great controlling industries have grown from nothing, by

(Continued on page 18)

The Nu-Way Sanitary Milker



In the building of milking machines, as in everything else, knowledge gained by experience is a factor of prime importance. Experience and knowledge, when combined with a policy of square dealing and an honest desire to build a product for long service and not merely for present gain, are a combination that spell success. Good will—the life-blood of permanent business—can be built up and maintained in no other way.

We believe if you will investigate the Nu-Way Milker you will be surprised with its many advanced features. Take for instance the gentle, uniform, action of alternately milking two teats at a time; visibility of the milk flow at each cup; and the exclusive sanitary features that have lately set a new standard in milking machine construction.

Read what Mr. Samuel U. Lear, prominent pure-bred Holstein breeder of Carlisle, Pa., has to say of his Nu-Way.

Standard Supply Co.,
West Chester, Pa.

R No. 6, Carlisle, Pa., Feb. 17, 1921

Gentlemen:—

Replying to your inquiry regarding the milker will say that the machine has actually exceeded my expectation both in its efficiency on the cows and in the production of clean milk. I might say to your surprise that my cows have increased in their milk which I attribute to the uniform manner in which they are being milked.

Would say I had investigated practically all milking machines before deciding on the Nu-Way and am more than pleased with the results in every way.

Thanking you for the co-operation extended to me in the past, I remain,
Very truly yours,
(Signed) SAMUEL U. LEAR.

Why not write for the Nu-Way catalogue today and let us send you our proposition, together with the name of the nearest Nu-Way user?

STANDARD SUPPLY COMPANY
WEST CHESTER, PA.

General distributor for

Nu-Way Sanitary Milkers

in Pennsylvania, New Jersey,
Maryland and Delaware

Both 'phones

"The Price of Milk"

By Clyde L. King, Ph.D.

Formerly
Chairman, Governor's Tri State Milk
Commission (Pennsylvania, Maryland,
Delaware), Federal Milk Commissioner for
the Eastern States, Milk Price Arbitrator
for the State of Pennsylvania.

**Comprehensive Treatment of the
Milk Industry in All Its Phases**

**NOW READY FOR
DISTRIBUTION**

**Every Dairy Farmer Should Have a
Copy of This Book**

Table of Contents:

Introductory—Chapter 1. The Public Interest in the Price of Milk. Part 1. The Price to the Producer—Chapter 2. The Forces That Fix the Price of Milk. 3. Manufactured Milk Products and the Price of Milk. 4. The Price Interdependence of Local, Primary and International Markets. 5. The Cost of Production. 6. Shall Dairymen Organize for Collective Bargaining? 7. Policies of Dairymen's Organizations in Their Relation to Price. Part 2. The Cost of Milk Production. 8. The Cost of Milk Distribution. 9. Sanitary Requirements in Their Relation to Price. 10. How Shall Milk be Distributed? 11. Can Milk Distribution Costs be Lowered? 12. The Public Interest in Milk Distribution. Part 3. Fair Price Policies. 13. The Food Value of Wholesome Milk. 14. Co-operation and Price. 15. Fair Price Policies.

Endorsed by Herbert Hoover, former Food Administrator; John LeFebvre, International Milk Dealers Association; Margaret H. Boden, Chm. Food Section, Philada. Fair Price Commission; R. W. Balderston, Secty. Inter-State Milk Producers Association.

ORDER YOUR COPY NOW

Price \$2.00 Delivered

For Sale by

**The Inter-State Milk
Producers Assn.**

721 Heed Bldg., Philadelphia

SECOND ANNUAL BRENT- WOOD NATIONAL SALE

The second annual Brentwood National sale and exhibition of Holstein cattle was held at the Commercial Museum, Philadelphia, March 29-31.

The sale brought out a large attendance and prices were on the whole considered excellent. The show and sale under the direction of Mr. W. G. Davidson, owner of the Brentwood Farm, Abington, Pa., was successful in every detail. The facilities for showing and selling were most excellent.

The aggregate of the sale was over \$200,000 and the highest price paid was \$27,100 for a s-year-old bull, Pietertje Prospect Colantha 233799, consigned by the Carnation Stock Farms, Seattle, Wash., which was bought by W. G. Davidson.

John P. Crozer, Upland, Pa., bought the top price cow of the sale, Carnation Matador Nena 515682, born May 16, 1919; one of the richest daughters of Matador Segis Walker, and bred to Carnation King Sylvia, a \$106,000 dairy animal.

The winner of the prize for the best female of any age at the show, Gertrude Titanic DeKol 187525 (illustrated on the first page of this issue) was purchased by Carl Schmidt, of Trenton, N. J., for \$4,050. This cow is in calf by Echo King Sylvia 267292 and will freshen in April. She was consigned by the Bell Farm, Coraopolis, Pa.

Good prices were paid for many other cows, bulls and calves, representing the pick of the Black and White breed from all over the country. The average price for the 166 animals entered in the sale was \$1,261.

Milk Plants and Testers Show Decrease Over 1920

That the post war re-adjustment has affected the milk and dairy industry of Pennsylvania to a considerable extent is indicated by the number of milk plant and testers licenses issued by the Pennsylvania Department of Agriculture, so far this year. In 1920 permits were issued to 573 plants for the purchase of milk and cream. This year only 496 have been issued, a decrease of 77. In 1920 there were 572 testers licensed to operate in the state while this year the number has dropped to 482, a decrease of 90.

An agent of the Pennsylvania Department of Agriculture will visit each milk plant in the state early in the year, this inspection work having already been started, the object being to see that the act of 1919 is being complied with.

THE SUCCESS FAMILY

The father of Success is Work.

The Mother of Success is Ambition.

The Oldest Son is Common Sense.

Some of the other boys are, Perseverance, Honesty, Thoroughness, Foresight, Enthusiasm and Co-operation.

The Oldest Daughter is Character.

Some of her sisters are Cheerfulness, Loyalty, Courtesy, sincerity and Harmony.

The Baby is Opportunity.

Get acquainted with the "Old man" and you will be able to get along pretty well with the rest of the family.—Ex.

CLEANING AND CARE OF MILKING MACHINES

(Continued from page 9)

ommended here is economical and easy to prepare.

A. Use a stone crock (20 gallon size). Wooden or metal wash tubs will spoil the effective strength of most of the solution now in use. Keep crock covered.

B. Common salt is the basis of this solution. Fill the crock nearly full with clean water and then add all the salt (clean stock salt or ice cream salt is satisfactory) the water will hold. This point is reached as soon as some salt remains permanently on the bottom of the jar. The brine is then up to full strength. Brine alone has been found to be a fairly effective solution, but the addition of some hypochlorite will keep the solution sterile. You can make your own hypochlorite from chloride of lime.

Additions should be made from the stock hypochlorite solution into the brine once a week in cool weather, and twice a week in warm weather. This is because all hypochlorides, homemade or commercial, lose strength more rapidly when warm than when cool. Also hypochlorides lose strength very rapidly if milk, straw, manure, cows' hairs, wood, etc., introduced into the solution. This is why at the first flushing of the tubes in hot water you must remove milk and adhering dirt from the teat cups and tubes.

C. The stock solution of chloride of lime is made by mixing one 12 ounce can of chloride of lime with a gallon of water in a crock. This is best done by adding enough water to the dry powder to make a paste, and then add water to the dry powder to make up to one gallon. Keep this solution covered. Allow sediment to settle a few hours and add one pint of clear top liquid to brine solution once every week in cool weather (twice a week in warm weather). Be careful to buy only fresh can of chloride if lime. Very old or badly caked material is worthless.

D. The brine and chloride solution for the milk tubes can be used as long as it remains clean and sweet. How long depends upon how much dirty material has been introduced into it. It may be a few days or it may be many weeks.

E. None of these disinfectants will penetrate into any greasy material that may accumulate, the presence of which will add to the milk millions of bacteria. It takes no longer to clean the machines after each milking than it does to milk one cow.

These directions were prepared by the Extension Department of the State College of Agriculture at Cornell University, Ithaca, N. Y. They are based upon experimental work carried on at the New York Agricultural Experiment Station at Geneva, N. Y. The Experiment Station has published bulletins upon milking machines in which further details regarding the above are fully discussed.

Milk for Health

MARCH MILK CONDITIONS

(Continued from page 1)

than was expected, largely because of the lack of employment of many wage earners, who, with a lack of knowledge as to the actual food value of milk, are disposed to cut down their consumption, when finances tighten up. The retail price of milk in this district is low in comparison to that in other territories, which should in fact, lead to greater consumption.

Prices in the Philadelphia territory were stationary during March. The basic price paid producers for 4 per cent. milk at all receiving points has been 8 cents a quart, or \$3.08 at receiving stations in the 50 mile zone. The price for surplus milk in March was \$2.33 for four per cent. milk, at all receiving points. This price shows an advance of nine cents a hundred pounds over that for February. The average price for surplus milk, 4 per cent. butterfat content, for the first three months of the year is \$2.37 while the basic price for the same period averaged \$3.08 in the 50 mile zone. On a weighted average basis this will bring the price paid in this territory higher than that paid in the other leading eastern markets.

The butter market which establishes the price of surplus milk has been weak and spotty. Continued arrivals of Danish and Argentine butter have had a depressing effect on the market at times. During March, approximately 4,120,900 pounds of butter were imported at Atlantic ports and since January 1st, 1921, a total of over 9,600,000 pounds largely Danish and Argentine butter have come in. Early in the month with 92 score creamery butter selling around 50 to 54 cents, Danish butter was offered at 46.

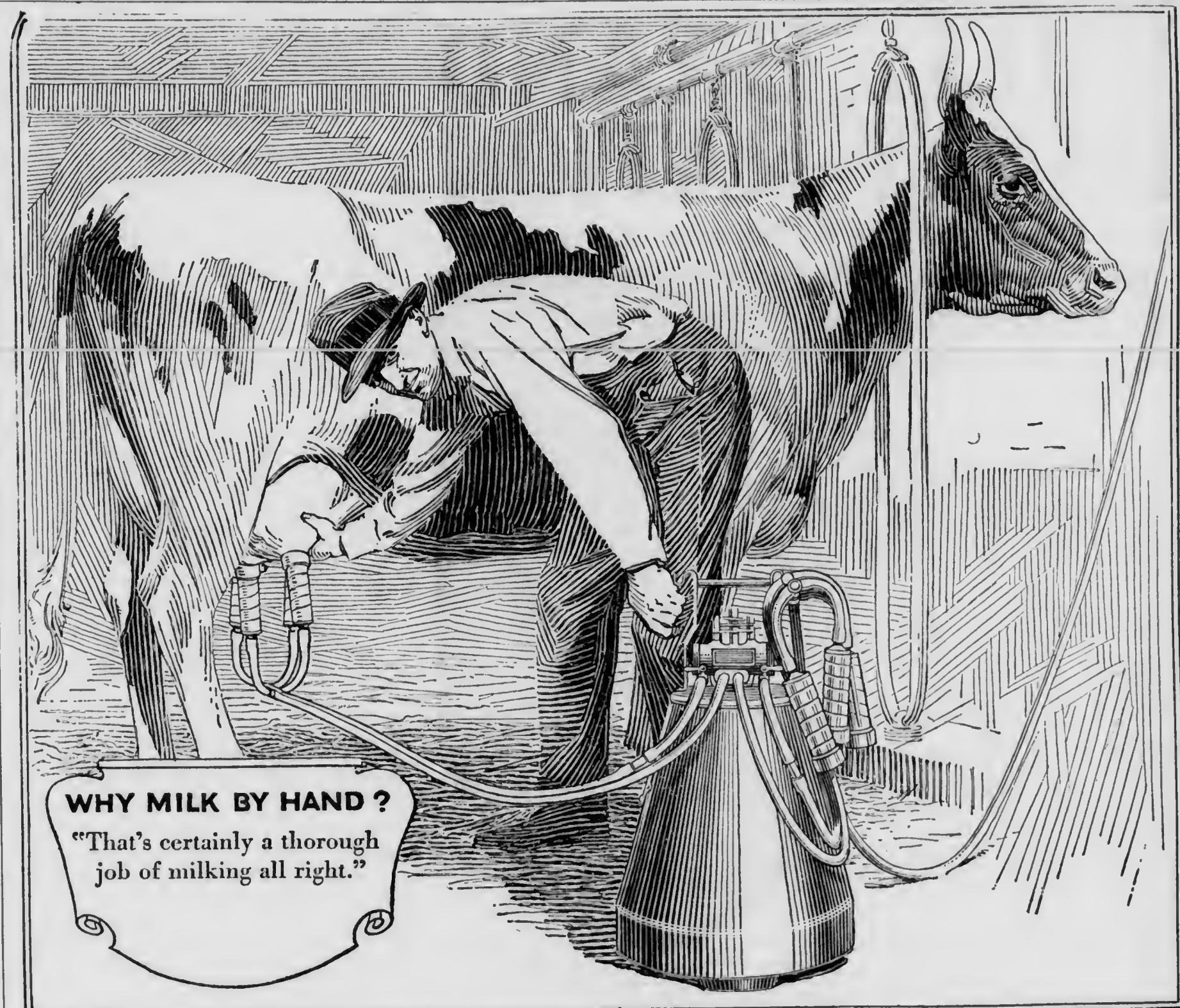
Butter sold early in March at the top price of the month, 54c. Prices declined steadily until the middle of the month, when 44 cents was reached. Since then there was a slight recovery reaching 48 cents at the close of the month. The average price for solid packed 92 score butter New York City for March surplus was 48.8 cents.

The condensed and evaporated milk situation has been gradually clearing up. Condensed milk has been stationary in price but more goods have been marketed and stocks are understood to be lower. Evaporated milk has been in better demand and has firmed up slightly, particularly advertised brands. Early in the month miscellaneous brands were quoted at \$5.00 to \$5.25 per case, but the market at the close of the month was firm at \$5.25 to \$5.50 per case.

An interesting fact is to be added that a number of condensaries, many of which have been closed since October last, have been re-opened and as stocks become absorbed other plants may be expected to resume. While these condensaries are outside the Philadelphia Milk Shed, the influence of their resumption should help the general situation even though lower prices, ranging from \$2.30 to \$2.50 per hundred for 4 per cent. butterfat milk is being paid.

The outlook for April is problematical. If the condensary situation continues to improve, the general market should gain strength. At the same time we are approaching the season of greater supply. At present the same prices which were in effect in March are expected to be maintained in April, but much depends upon supply and conditions.

Announcements of the reopening of 10 condensing plants in New York and Pennsylvania are reported. In some instances these include plants that have been shut down since October of last year. Prices range from \$2.30 to \$2.50 per hundred for 4 per cent. milk.



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The AGRICULTURAL CONDITION

By HENRY C. WALLACE

(Continued from page 1)

find, for example, that the cost of producing a bushel of corn in Iowa, the greatest corn state, was more than 90 cents. This includes the land cost, the labor cost, and everything else which ought to be included.

Many people say "you are figuring the land at inflated price. You should not do that. The farmer did not pay that price for the land. He wants dividends on water."

It is true that the land charge is considered on the basis of its value a year ago, but it is also true that the advance in land prices was not nearly as great as many people suppose. They hear of the occasional sales at \$400 or \$500 an acre and assume that that represents the average. Nothing of the sort. The average advance in the value of our rich corn belt land was only about 60 per cent. above pre-war values. It must be remembered also that in the principal corn states over half the land is farmed by tenants and these tenants mostly had to pay rent on the basis of the advanced land values. It is true further that if we omit the land charge altogether, the price which the farmer can get for a bushel of corn is still considerably below what it cost him to produce it. The largest item of cost in corn production is not land but labor.

The man who has been farming his own land and who has saved his money has prospered. The five years prior to 1920 were profitable years especially to the grain farmer who was so fortunate as to have good crops. If he exercised ordinary intelligence he made more money than he ever before made at farming. Those years were not so profitable to the livestock farmer. The man who grew his own live stock and own grain and fed his grain to the live stock, on the whole, made money, although not as much as if he had sold the grain instead of feeding it. The man who bought the live stock and bought the grain and fed the grain to the live stock, on the average, lost money. When hogs were selling at \$20 per hundred weight everybody seemed to think the hog feeder was growing rich, but most of the time when hogs were selling at those high figures the men who had to buy the grain to feed the hogs lost money.

The second cause of the farmer's trouble is this: Prices of farm products have dropped out of all proportion to the prices of other things, as well as out of all proportion to the cost of production.

For example, the price of corn and oats today on the Iowa farm is about 20 per cent. below the normal price of these crops before the war. The present price of fat cattle and of hogs is from 20 to 25 per cent. above the pre-war normal, if we take Chicago prices, but on the farm the prices of both cattle and hogs are down to pre-war normal.

Now note the prices of some of the things the farmer must buy: Wages of farm hands are about 100 per cent. above the pre-war normal, railroad rates are from 70 to 90 per cent. above pre-war normal, such basic commodities as pig iron, coke, petroleum, lumber, Portland cement, are far above the pre-war normal—from 100 to 150, and in some cases, 200 per cent. above the pre-war normal. Factory wages and railroad wages are both more than 100 per cent. above the pre-war normal.

In other words, while the farmer is selling the things he produces at prices no higher, and, for great surplus crops, lower than the pre-war normal, he must buy practically everything he needs at prices from 50 to 150 per cent. above the pre-war normal. The severe agricultural depression is inevitable as long as such a condition exists and this depression will certainly be communicated to industry and business generally.

It is a situation which should challenge the very best thought of the entire nation. If it continues the trouble will be communicated to every one. We are brothers one of another. Anything which hurts the farmer will very soon be communicated to all of our citizens. The farmers represent probably 35 to 40 per cent. of the population. Anything which seriously affects their buying power will bring trouble to the people who make or deal in the things the farmer buys.

It is a terrible indictment of our modern civilization when this great country is in the period of what almost might be called economic chaos because of our great surplus food supply, while across the seas, in both directions, almost half the world is suffering for want of food. If our statesmen had given more thought to getting the world back on a sound economic basis, and perhaps had spent less time on idealistic schemes and theories, they would have rendered a greater contribution to the peace and orderliness and happiness of the people of the earth.

Now, as to this present situation, surely the duty of the Department of Agriculture is evident. We should do everything possible to find an outlet for this great food surplus. We should search for ways to produce more cheaply. Our scientific men should try to find new uses for our surplus crops. We should help develop more efficient marketing systems, straightening curves and lowering the grades between the producer and the consumer. It is a time for every man who can help, to take hold. As in the days when we dragged our fire engines by hand to the scene of the fire and every good citizen rushed out and took hold of the long rope and did his bit, so we must do now. Every good citizen, no matter in what business he may be engaged, should do what he can to help the farmers through this period of depression, not for the sake of helping the farmer alone, but for the sake of helping himself.

We can not hope to reach normal conditions until we arrive at a price level which will be fair to all our people and all products. Farm products must come up in price and other products come down until the normal relation between them has been restored. This talk of bringing prices, whether farm prices or other prices, back to the pre-war normal is morally wrong and economically impossible. We incurred a heavy national debt on the inflated prices. If we could force all prices back to the pre-war normal—which we cannot—it would be equivalent to just about doubling that debt. We can pay off our debts much easier if we maintain a price level more nearly the level at which the debts were incurred. Of course, the excessively high prices which prevailed during the war cannot continue, but if we should try to bring about a level, say 70 per cent. above the pre-war normal, everybody would be better off.

We will get through this period. The nation is not going bankrupt. The farmers are not going bankrupt. Neither are they going to lie down on their job. Gradually farm prices will be brought

into fair relation with other prices and we will go ahead hitting on all cylinders. But there is another thing in the long run—a more important phase of our agricultural problem which we have been slow in considering. Let me sketch briefly the development of our agriculture.

The farmers of the United States during the past seventy years have, on the average, produced and sold grains and live stock at less than the cost of production if we take into consideration all the factors which properly enter into production costs. What I mean is that if the farmer would practice a sound system of business economy, charging a fair interest on the capital invested, both in his farm and his farm equipment, a fair wage for the actual labor expended on the farm against his receipts from the marketing of his crops it will be found that he has not received for them enough to cover his actual costs. We will omit the value of the fertility of his soil, which is, in effect, a portion of his capital and which he has marketed in his crops but which we will simply throw in for good measure, although this must be replaced if crop production is to be maintained. I know that when a statement of this kind is made many people question it. They think of individual farmers whom they have known and who have become very well to do, but I am speaking of the average farmer, the farmers as a mass, and the statement I have just made is an absolutely truthful statement which has been abundantly corroborated by scientific investigation.

The farmers have been able and willing to sell their crops at less than the actual cost of production because, first, they have been willing to accept the value of the farm as a home, as a place to raise their children, as a part of the substantial reward for their work; and, second, because as our population has increased there has been a steady increase in the value of the farm land. In times past, therefore, the young farmer who could get enough ahead to make a very small payment on a piece of land—enough to give him a foothold—and who had a lot of hard work in him, and who had a good wife, as most of them have, has been able, by living very economically, denying himself and his wife the luxuries and many of the comforts of life, to hang on, paying out on the farm and finally to see it growing into a valuable piece of property.

During all this period we have been a great surplus producing nation. We have grown more food than our own people could consume. As a result we have had to compete with the farmers of the world in the great consuming markets and take prices fixed by that competition. Another result of this great surplus of food was to stimulate our industrial development and to build up our commercial enterprises of all kinds until now more than one-half of all our people live in the cities and industrial centers.

The steady increase in the value of our land and the relatively low prices for farm products has caused a constant drift of young farmers to the towns and cities where they thought they could secure better pay for their labor and could see better opportunities to advance themselves in a material way. In some of our heaviest producing states there are not as many people on the farms today as there were thirty or forty years ago. This movement from the farm to

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the city has been a perfectly natural movement and fully justified by conditions. It will continue as long as the cities offer greater financial rewards, greater opportunities for advancement, more comfortable living conditions, and better social, educational, and religious privileges. It is the inevitable result of economic conditions and no amount of talk extolling the beauty of farm life can stop it. Nor has this relative decline in the producing population been a very serious matter up to the present time. Certainly it has not been serious from the farmer's viewpoint. We have made great advances in methods of producing machinery has enabled us to increase production per man. Notwithstanding our increase in total population and the decrease in farm population we have, until very recently, steadily increased food production per thousand of total population. This increase has come both from the use of labor-saving machinery and from bringing into cultivation new areas of fertile land. We cannot keep up this gait in the future. Consumption has almost overtaken production under normal world conditions.

Most of our fertile land which can be farmed profitably without expensive reclamation has been taken up. We still have large areas of swamp land and dry land and cut-over land, but these lands

cannot be profitably reclaimed and farmed unless we can depend upon higher relative prices for farm products than prevailed before the war. So, also, we can greatly increase the productive power of a large area of the land in surplus producing states, provided we can depend upon prices which will cover the increased expense. Under our system of farming we have produced far more per man than almost any other nation, but we have not produced nearly as much per acre as in the nations of western Europe, for example. Our greatest increase of food production in the future must come from increasing our acre yields, but this, in turn, depends upon prices which will justify the increased cost.

The farmer is the one man engaged in a big business who has had no voice in fixing the price of the things he produces. He has been compelled to take whatever prices he could get. His cost of production has not at any time been considered in determining this price. In times of small crops prices have sometimes been high. In times of large crops prices frequently have been ruinously low. Very large crops, as a rule, give the farmer fewer dollars than small crops. Farming seems to be one business in which large production is always penalized.

No doubt, when we get through this period of world readjustment and get

squared away on an orderly basis there will be a gradual increase in the value of farm land, provided our national policy is fair to agriculture, but this increase will be much slower than in times past. The speculative value has been taken out of the land. The farmer can no longer depend upon the increase in the value of his farm to make good losses suffered through his farming operations year by year. Farmers' crops must sell higher relatively in the future than in the past.

We seem to have been going on the theory that the fertility of our soil, especially in the great corn and tame grass country is inexhaustible. To the nation this is a most dangerous theory. We must set about in earnest the development of an agricultural policy which will enable us to feed our people at fair prices and, at the same time, retain the fertility of our soil, our greatest natural material asset.

The increase in tenancy has aroused great concern. Many people seem to think that tenancy is in itself an evil. Not necessarily so. As land advances tenancy increases. This has always been true everywhere and it is not necessarily a bad thing itself. The farmer who has a limited working capital can far better afford to rent than to own after the land has reached a fairly stable value

(Continued on page 17)



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RECORD OF COW TESTING ASSOCIATIONS

WEST CHESTER COW TESTING ASSOCIATION

Allen Goodman, Cow Tester

Number herds tested during month, 21; cows in milk, 486; cows dry, 99; cows on official test, 28; number of separators tested, none; number cows sold, profitable, 1; unprofitable, 3; number cows producing over 40 lbs. fat, 63; over 50 lbs, 28; number cows producing over 1,000 lbs milk, 77; over 1,200 lbs. milk, 70. Ten highest producing cows in butterfat for the month as follows:

Owner	Breed of cow	lbs. milk	% fat	lbs. butterfat
Westtown School	Gr. Holstein	2368	3.1	74.4
Edgar W. Powell	Gr. Holstein	1993	3.7	73.7
Westtown School	Gr. Holstein	2309	3.1	71.6
E. Page Allinson	Holstein	1931	3.9	71.4
Howard Parker	Gr. Holstein	1630	4.1	67.8
Westtown School	Gr. Holstein	2015	3.3	66.5
Howard Parker	Gr. Holstein	1720	3.6	61.9
E. Page Allinson	Holstein	1788	3.2	57.2
Westtown School	Ayrshire	1590	3.6	57.2
Greystone Jersey Farm	Jersey	1198	4.7	56.3

SOME OF BLAIR COUNTY'S BEST COWS

The February report of the Southern Blair Cow Testing Association shows that 46 cows of the 239 tested produced over 1,000 pounds of milk during the month, and that 31 of these produced more than 40 pounds of butterfat. A little further classification, however, by the tester, C. H. Detwiler, reveals the fact that 14 of these cows produced over 1200 pounds of milk during the 30 day period and that 6 produced over 50 pounds of butterfat.

Mr. B. S. Snowberger, of near Roaring Spring, owns 3 pure bred Holsteins which rank among the 10 highest cows in the association for the month of February; two of these are in the 6 cows producing more than 40 pounds of butterfat. The highest record is that of Flossy, a pure bred Holstein junior cow, owned by H. K. Metzker & Sons, near Martinsburg. Her record is 86 pounds of butterfat for the month, with a butterfat test of 5.4. This is an unusual record and one that is hard to duplicate. To add to its value, it should be stated that she has been milking since November.

The records and owners of the highest ten cows for the month are as follows:

Owner	When fresh	lbs. milk	lbs. butterfat
H. K. Metzker & Sons	Nov.	1593	86.
John Lloyd	Nov.	1272	49.7
Paul Boiley	Dec. 8	1029	51.5
Roy Steward	Nov. 9	1170	49.1
E. B. Gartland	Dec.	1419	71.
C. E. Little	Dec.	1257	52.8
B. S. Snowberger	Jan. 21	1404	56.2
B. S. Snowberger	Dec. 25	1491	52.2
B. S. Snowberger	Dec.	1248	48.7
Albert Perry	Jan. 21	1260	55.4

AVONDALE-WEST GROVE ASSOCIATION

Thomas C. Y. Ford tester for the Avondale-West Grove Association, reports as follows for the month of March: Sixteen herds were tested with 210 cows in milk and 23 dry; unprofitable cows, 2; Seven pure breeds replaced grade cows; number of cows producing over 40 pounds fat, 11; number cows producing over 1,000 pounds of milk, 14; over 1,200 pounds, 2. Grain prices are reported at \$50 a ton for 24% protein. The ten highest producing cows for the month are as follows:

Owner	Name of cow	Breed	when fresh	lbs. milk	% fat	lbs. butterfat
Edgar Haines	Bonnie	Guer.	Feb.	1109	4.4	49.2
D. D. Bettinger	4	Guer.	Feb.	1165	4.1	47.8
Edgar Haines	11	Guer.	Feb.	1024	4.6	47.1
Hoagland Gates	Julie	Guer.	Dec.	1204	3.8	45.7
Jesse Cloud	Anna	Guer.	Dec.	830	5.5	45.6
M. H. Mitchener	Polly	Hol.	Feb.	1381	3.3	45.6
Jesse Cloud	Granny	Guer.	Jan.	1049	4.3	45.1
Edgar Haines	Amy	Guer.	Feb.	805	5.2	41.9
A. P. Townsend	11	Hol.	Feb.	1140	3.6	41.0
J. W. Passmore	Sally	Hol.	Feb.	1107	3.7	40.9

STATE DEPARTMENT OF AGRICULTURE NOTES

There are approximately 11,972 pure bred bulls owned on the farms of Pennsylvania, along with 8,587 bred boars and 4,102 pure bred rams. The number of pure bred bulls and boars show a decided increase over a year ago.

In 1920 there were 557 registered and 392 unregistered stallions licensed by the Bureau of Animal Industry of the Pennsylvania Department of Agriculture. In 1910 the number of stallions registered in the state was 2,385, a decrease of 65 per cent. in ten years.

On March 1 it appeared that the farmers of Pennsylvania were holding 31 per cent. of their 1920 wheat crop, or 8,340,320 bushels, as compared with 3,758,830 bushels at the corresponding period a year ago.

The number of flocks of sheep in Pennsylvania is estimated at four per cent. less than a year ago.

Approximately 57 per cent. of the farms of Pennsylvania are provided with telephone service.

INTER-STATE DAIRY COUNCIL MONTH'S ACTIVITIES

(Continued from page 3)

plans involve real talks on economic production. The value of this project as bona fide evidence to the consumers of our desire to serve them, cannot be over estimated. It will be of particular value to our producers to learn, first hand, of the advertising value of quality in marketing their product.

A general meeting of the executive committee of the council is being planned for early in April, to which it is the purpose to invite representatives from all the important organizations, commercial, educational and philanthropic, in Philadelphia and vicinity. Mr. M. D. Munn, president of the National Dairy Council, will make an address at this meeting, formal reports will be made and a performance of the playlet, "The Fountain of Youth" will probably be given by a cast from one of the local schools.

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SALES OF MILK SUBSTITUTES

(Continued from page 8)

pound. The difference between the price at which condensed milk and Hebe respectively may be manufactured and sold is such that the temptation to impose upon the public has been too great to be resisted. Whether Hebe is as wholesome and nutritious as condensed milk is unimportant so long as it is used as an instrument of fraud. Producers of an article of food which may be and is used to deceive the public are not favored in courts of equity."

"It is the claim of these foreign corporations that they ought to be permitted to sell this because the label contains an analysis of its contents. The Federal Court, however, found this to be no answer to the fact that it served as a means of deception. The following is from the opinion of the three judges who heard the case in the first instance:

"The label, it is sure, states that Hebe is a compound and names the elements of which it is composed, but it also informs the public that it may be used for coffee and cereals, for baking and cooking. It may be applied to and is designed for the same uses as condensed milk. Its appearance is the same as condensed milk, and if there is a difference in the taste of the two, it is not such as the average layman would be likely to detect. Blame, therefore, cannot be righteously attached to the unwary consumer who does not clearly scrutinize the label upon the package in which Hebe is contained and who concludes that that article applied as it may be to the same purposes, as condensed milk, is and must be condensed milk itself although parading under a fanciful name, and especially when it is sold him by the retailer in response to an inquiry for such milk."

In Maryland the sale of such compounds and substitutes are prohibited under an act passed by the legislature in 1919.

In conclusion, it may be pointed out that, in as much as these so-called milk substitutes or compounds do not have the food value or growth promoting elements that can be obtained in large quantity in whole milk or whole milk products sufficient to sustain a normal growth of infants and children, and that they are sold to an unsuspecting public through unscrupulous dealers, and that in this sale it is quite evident that there is such an intent to defraud the buyer by the careful selection of markets for the same in the poorer and most densely populated territories, with an entire absence of their sale in the better class districts, in which reside those of a higher degree of education.

That their cheapness, made possible by the elimination of the milk fats from whole milk and the substitution of a vegetable fat much lower in cost, attracts a certain class of buyers, more particularly the foreign and poorer class, who are not able to discriminate in the food value of what they buy and who are thereby defrauded into the feeding of their children and infants with such products, which ultimately results in malnutrition and frequently in the development of such, in later life, as become charges upon the state.

The methods of sale of these compounds are such that they may be classed as frauds. Being in the same size tins or cans, style of label not dissimilar to those used on standard brands of condensed milk, displayed with or alongside of standard brands, in many cases with comparative prices displayed plainly, they lead to their purchase in good

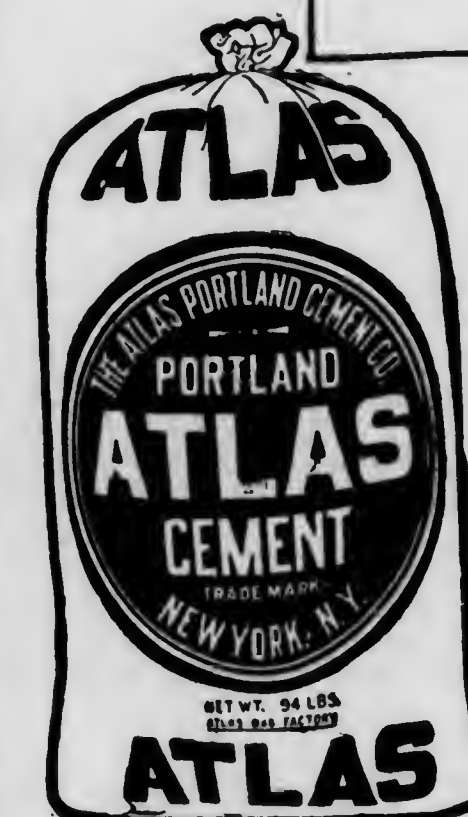


Permanent, Fireproof and at Moderate Cost

ONE tiny firebrand or an unsuspected grass fire during the night may mean the complete loss of your automobile unless it is properly protected.

A concrete garage, built of Atlas Portland Cement, will be not only fireproof but also attractive in appearance. Its first cost will be low with no additional costs for upkeep or repairs. It will require no painting and will shield your car against excessive heat or cold in all seasons.

Send for our book "Concrete on the Farm." It tells you all about the use of concrete for all farm construction.



"The Standard by which all other makes are measured"

The Atlas Portland Cement Company
NEW YORK Boston Philadelphia Birmingham Dayton Des Moines St. Louis CHICAGO

The Atlas Portland Cement Company
(Address the Atlas Office nearest you)
Please send me a copy of "Concrete On The Farm"
without cost or obligation.

Name
Address

faith by the poorer, ignorant and foreign classes or buyers.

It is our duty to protect the public health, to promote the normal growth and health of infants and children necessary for the development of mankind, not only for the best interest of the public, but for the welfare of the Commonwealth in general.

DIDN'T IMPROVE IT

"Got any property around here?" asked the tax collector at the farmhouse door.

"Yes, I got a small lot," replied the buxom woman, with the gingham apron, who answered the knock.

"Where is it?"

"About two miles down the road from here."

"Is it improved?"

"Well, I got a husband buried there, but I can't say it improves it any."

—Yonkers Statesman.

Three hundred and three potato spraying demonstrations in forty counties in Pennsylvania last season gave an average increase of 74.5 bushels per acre.

EASTERN GUERNSEY DEALERS HAVE SALE

The Eastern Guernsey Breeders' Association have planned an unusual feature in connection with their sale at Devon, Pa., on Friday, May 13th. It appears to have all the spice of novelty. A registered Guernsey heifer calf will be given to some one who attends the sale and guesses nearest to the average of the sale. Here is a grand opportunity for some keen figurer to get something for nothing. All that contestants will be called upon to do is to write their guess together with their name and address and hand it in before the first animal is sold.

A splendidly bred calf of striking individuality has been bought for the prize. Her name is May King's Alpha of Pomeroy, born November 6th, 1920. Her sire is Laverna's Ultra May King 24660 (A. R.), a son of Ne Plus Ultra 15265 (A. R.), out of Rose King's Laverna 27294 (A. R. 2717), with a record of 10,040.10 lbs. milk, 503.28 lbs. fat (class C). Her dam is Royal's Alpha 77030

(A. R. 8592) with a record in class GG of 9,826.40 lbs. milk, 455.33 lbs. fat. She is now on re-entry test and going splendidly. Her owner, Mr. M. T. Phillips has entered her in the sale, feeling that she is worthy to represent his fine herd. She is a daughter of Langwater Royal 14253 (A. R.), sire of twenty-two A. R. daughters and Alpha of Pinehurst 3rd 35069 (A. R. 2544) 357.79 lbs. fat (class G), a double granddaughter of Glenwood Boy of Haddon 4605 (A. R.)

This "added feature" will no doubt add a lot of interest to the proceedings. Heifers of this type are not often to be had without considerable loosening of the purse strings. Incidentally some one will be able to go home feeling very happy inasmuch as the "Friday the thirteenth" hoodoo will be broken for him forever.

The Henry Cow

Our bossy cow is in the dell
With coat as fine as silk;
For beef the dear we'll have to sell
When flivvers give the milk.

—Youngstown Telegram.

MENTION THE MILK PRODUCERS REVIEW WHEN WRITING ADVERTISERS



The best protection for silage and investment

The Craine is the silo built with triple walls. Outside the inner wall of upright fitted staves is a wall of Silafelt water- and - frost - proofing. Binding both is the spiral smooth-finish Crainelox covering—no hoops, no lugs, no weak spots, but protection in every inch of space. Rain, juice, ordinary frost, air—nothing penetrates the Craine. A permanent building that pays you richly every year.

You can rebuild your old broken down stave silo into a new, permanent, handsome Craine and save half the cost of a new silo. Do it. Write today for full particulars. Get our Agency proposition.

Craine Silo Co., Inc.
Box 230 Norwich, N. Y.

Which Way— Is Your Farm Going?

Is it moving toward greater fertility, greater production, greater earning power or is it moving toward lower production, decreased fertility and smaller income?

Many a Farm

That has been going back because of acid soil has been brought to fertility and profit by the regular application of

Michigan Pulverized Limestone

Calcite Brand Michigan Limestone is 99% pure. Taken from the largest limestone quarry in the world, dried and ground in the largest limestone mill in the country. Quantity production enables us to market cheaply.

BUILD UP YOUR SOIL WITH LIMESTONE

Do It The Michigan Way
MICHIGAN LIMESTONE & CHEMICAL COMPANY
NEWTON S. GOTTSCHALL
General Eastern Agent
1501 Arch St. Norristown, Pa.

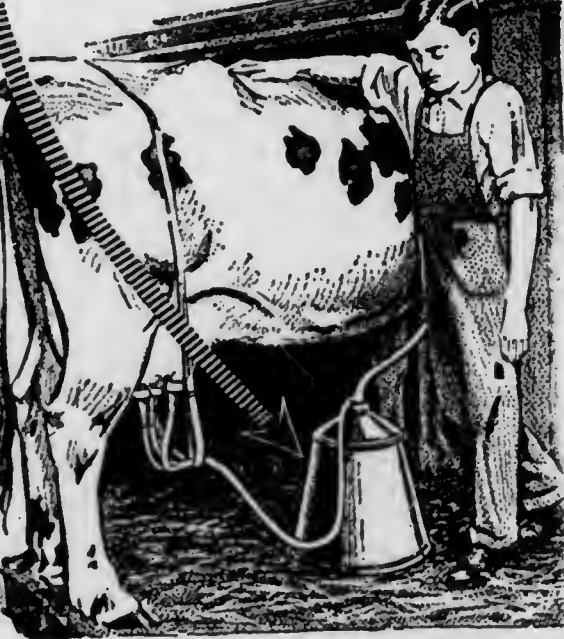
Dairymen Note This!

This is the local agency for the well-known Hinman Milker—prepared to make an estimate on your needs, to properly install your equipment, to make sure that everything is satisfactory, to render any service you desire at any time.

HINMAN MILKER

The simplest of all milkers. Proved by 10 years experience and thousands upon thousands of users to be the most efficient and economical of all milkers. Sure, safe, a great time and labor saver and a benefit to the cows. Boys and girls can and do easily operate it. Does the work of 3 men and does it better!

Call and see it. Or write for big, fine, free catalog.
J. H. HICKS, Avondale, Pa.
Phone 109R2 West Grove, Pa.



Starting, lighting, ignition—storage batteries of every description, make and for every purpose are recharged, repaired and rebuilt here by skilled battery men working in a fully equipped and stocked shop.

OUR SERVICE is unbiased and dependable.

Pusey & Young Storage Battery Station

WEST CHESTER, PA. COATESVILLE, PA.

Reading Bone Fertilizer

Quality Service Satisfaction
Feeding the World: The American farmer's job. To do your utmost the land should be fed too. Stick to the old dependable when it comes to feeding the land—Reading Bone Fertilizer.

(This trade mark means quality)
Reading Bone Fertilizer Co., Reading, Pa.

Ask your dealer for Reading Bone Fertilizer. Write for booklet and further information.

Hood Farm Abortion Remedy and Hood Farm Breeding Powder

Will Check and Prevent

ABORTION

If you are having trouble from abortion, order these two Remedies at once, give them a thorough trial and we are sure that you will be pleased with the result.

Chemung, N. Y.
Gentlemen:—For the enclosed five dollars please send me the Abortion Remedy and Breeding Powder. Have had splendid success with your Remedies. No more abortion.
PHIL WYNKOOP.

PRICES: Abortion Remedy, prepaid, \$1.25, \$2.75 and \$9. Breeding Powder, prepaid, \$1.15, \$2.75 and \$5. Injection Tube, by mail, 90 cents. One medium Breeding Powder, one medium Abortion Remedy, one tube, prepaid, \$5.75. Please mention this paper.
C. I. HOOD CO., Lowell, Mass.



INTERSTATE PRODUCER Heavy Buyer at the Second Brentwood National

Gertrude Titanic DeKol 187525, the subject of our illustration on the first page, was awarded the championship for the best female of any age at the show connected with the Second National Holstein Fresian Sale, Philadelphia, March 29-31. This cow was purchased by Carl Schmidt, Trenton, N. J., and will go on his Bunker Hill Farm at Ewing, operated by his son, Henry Schmidt, who is secretary of the Ewing (N. J.) local of the Inter-State Milk Producers Association.

This cow is a 32-lb. granddaughter of Pontiac Hercules, who is a son of the first century sire, Hengerveld DeKol. She produced 1,000 pounds butter in 309 days. She is bred to Echo King Sylvia 267292, last son of May Echo Sylvia and is due to freshen early in April. She was consigned by J. A. Bell, Jr., Bell Farm, Cornapolis, Pa.

Mr. Schmidt also purchased another cow, Bessie Korndyke Segis 308833 with a yearly butter record of 725 pounds, consigned by Lothian Riverdale Stock Farms, Novelty, Ohio.

Settlement workers are taking advantage of the opportunity offered by the Inter-State Dairy Council and the University Settlement had the film, "The Fountain of Youth" and a talk by Dr. Lyons for their Jewish Mothers Club, in Philadelphia, Pa. Later in the week the Italian Mothers Club saw the lantern slides and Miss Barger told the story of "How a big city gets its milk supply."

Synthetic cows give us milk
"I will do us good to quaff;
But will synthetic cows be trailed
By a synthetic calf?"
—Houston Chronicle.

ENORMOUS QUANTITIES OF OLEOMARGARINE USED IN THE UNITED STATES

By N. S. Gottshall

While we were at war with Germany the American people were urged to use many food substitutes in order that the army, upon whom so much responsibility rested, might have the best food and be properly fed. Then it was common to hear the remark: "This is a day of substitutes." Now that the war is over and that the period of readjustment is on and practically all soldiers are back in civil life, most of the people imagine that there are no more food substitutes in use.

If we conduct a little investigation we will find that there are a few of these substitutes still on hand and that some are growing in popularity—from one reason—It is the mad rush for the dollar, a few pennies are apparently saved (?) while from the health standpoint, dollars are lost. In many cases we have given less attention to the feeding of ourselves, our families or our babies, than the farmer has given to the feeding of his hogs and calves.

One of the chief substitutes entering human consumption is oleomargarine or butterine or nut margarine or any number of the many compounds sold as substitutes for straight butter.

In an advertisement appearing in a recent issue of one of the city dailies, figures were given showing that the people of this country consumed annually 370,000,000 pounds of oleomargarine or similar products. What does this mean? Some may say that it represents a large saving of money to the consuming public. From one view point it may, provided the public gets food value for its expenditure, not obtainable in another way. But these oleos are lacking in the amount of vitamins contained in butterfat. Without a suitable quantity of these vitamins, normal health and growth cannot be sustained.

Let us take another view of the situation. If we assume that 370,000,000 pounds of oleo is used as a substitute for butter made from cows milk, it means that this amount of oleo supplants 308,000,000 pounds of butterfat, allowing an overrun of 20%, which makes these figures conservative.

Reducing this to the cow basis, allowing an average annual production of 4000 pounds of 4 per cent. milk per cow, which is a shade more than the average per cow in Pennsylvania, we find that the 308,000,000 pounds of butterfat represents 7,700,000,000 pounds of milk or the yearly product of 1,925,000 cows. More than twice the dairy cow population of the State of Pennsylvania.

It is a fact that there are many milk producers throughout the country who are clamoring for higher prices for their dairy products yet at the same time they sell all of the milk or butter they produce and for their own home consumption buy oleomargarine, because the cost is less.

Such a practice is only "adding lead to our own boots" in the effort to drag ourselves out of the mire. Such practices are the drawbacks in the country in the efforts to adjust conditions on the farm so that our young people, upon whom the progress of agriculture in the future largely depends, may be retained on the farm and fed proper food that will supply the elements needed for proper growth and physical fitness and mental development.

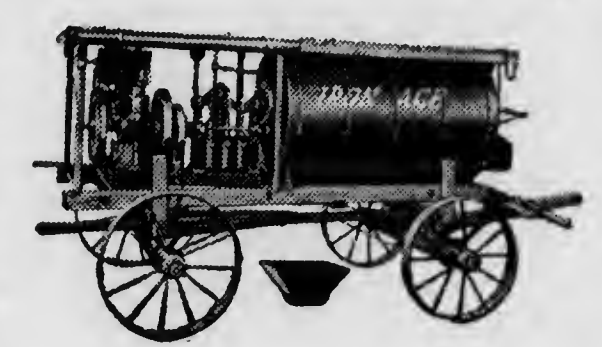
(Continued on page 18)

EVERYTHING FOR THE MODERN FARM AND DAIRY

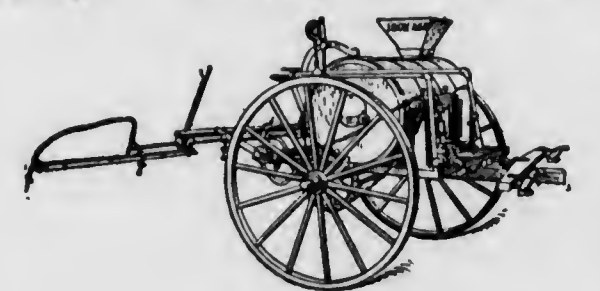
Iron Age Crop Preservation Machinery

Although we handle sprayers to meet practically every need of field, orchard or garden, we specialize particularly on the Iron Age orchard and traction sprayers shown here. These sprayers represent the very latest development in the science of spraying. With them high pressure can be developed which thoroughly penetrates every hiding place of bug or disease, and with the minimum amount of spraying solution. The round tank permits the use of large agitators that work near the sides and bottom to keep heavy mixtures in uniform strength.

Both types are equipped with Iron Age Triplex pumps. Pressure is supplied by means of a brass pump working through a stuffing box. There are no cylinders to wear,



chip or consume power, no leather or rubber plungers to corrode or wear out. The valves are bronze balls which are easy to get at for cleaning. Strong corrosive mixtures will not affect this pump.



All Iron Age Traction Sprayers are equipped with the new Iron Age Pressure Retainer and Relief Valve, an extremely important and exclusive feature which relieves the wheels from pump pressure when the spray is turned off, and retains the full strength pressure ready for instant use when the supply is turned on again.

We have printed matter descriptive of these lines which we will gladly send upon request.

WILMINGTON STORE:
216 West 7th St.
WILMINGTON, DEL.
Bell Phone
Wilmington 6405-W

PHILADELPHIA FARMERS AND DAIRYMENS SUPPLY COMPANY

Everything for the Modern Farm and Dairy
1916-1918 MARKET STREET - PHILADELPHIA

AGRICULTURAL CONDITIONS

By HENRY C. WALLACE

(Continued from page 13)

based on its productive power. Men are willing to invest their money in land and accept a very low rate of interest because of the security of the investment, but there are evils which grow out of the tenancy system which must be corrected.

If we are to make this a self-sustaining nation agriculturally, as President Harding put in one of his speeches, there is no time to be lost in studying these great problems. It is not a question of production alone, it is a question of the farmer being able to sell what he produces at a price which will justify him in continuing to produce. We are the best producers in the world but our sales system is very bad indeed. We must study everything which influences both production and price. We must look into the matter of competition from farmers of foreign lands where the agriculture is still being exploited and where the standards of living are very much below the standards which we demand for our people. We must look into world conditions both of supply and of demand and produce more intelligently and adjust our various crops to the probable needs. We must look into the administration of our credit machinery. Those who control the finances of the country and who have in their power to influence, either directly or indirectly, the extension of credit can exercise a large amount of control over the prices of farm products. The same thing is true of the administration of our transportation systems. Through the simple device of regulating the flow of cars the

prices of farm products can be sent up or down at the will of those who exercise such control. We had some costly experiences along this line during the war.

In short, the people of the nation must come to understand that our prosperity as a nation depends upon a prosperous and wholesome agriculture.

I cannot now speak in detail of the many lines of work in the Department of Agriculture. We have here a magnificent body of men and a splendid organization. We are going to try to use the scientific and practical knowledge of these men wherever it can best be used to promote the agriculture of the nation.

LOCALS

The Anselma, Chester County, Pa., local was organized on March 10, 1921, with a large initial membership. Roger Gordon was elected President; Harvey Moore, vice President; Howard Bertolet, Secretary, and Charles Walleigh, treasurer. This local begins its career under most auspicious activities and promises to be an important local of the association.

POOR RECORD DAIRY COWS

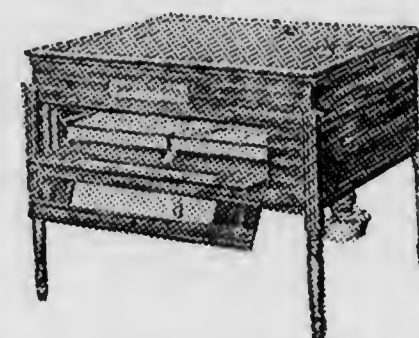
Is the first year's milk record a good index of what a cow will do in after life? Some cows make a poor record the first year and the farmer often keeps her hoping that she will develop into a good cow later on. A study of the records of the Pennsylvania State College herd shows that when a heifer freshens normally her first year's record is almost conclusive evidence as to her future performance.

The Reliable Blue Flame Wickless Oil Heated Colony Hover

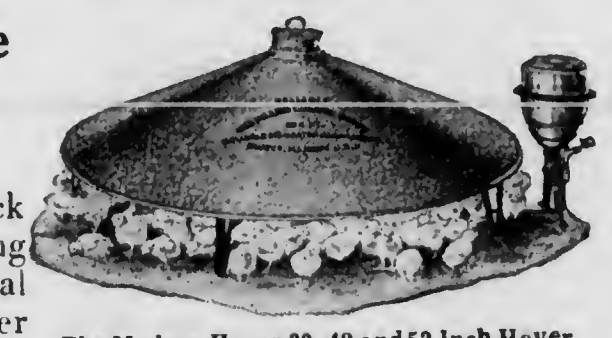
This hover has the same chick capacity as the coal-burning brooder. A few of the special points on this oil-heated hover are as follows:

Burns Coal Oil.
Steady Blue Flame.
Safe and Convenient.
No Wick to Trim.
Abundance of Heat.
Visible Oil Feed.

OUR SPECIAL INCUBATOR



An exceptionally good machine at an extremely moderate price.



The Modern Hover 30, 42 and 52 Inch Hover

Simple in Construction.
No Coal Smoke or Gas.
No Oil Fumes.
Flow of Oil Regulated Automatically.
Easy and Comfortable to Operate.
Inexpensive and Economical.

Reliable Incubator

Come in all sizes from the Baby Grand of 50 Egg Capacity for family use, to Standards of 250, 350 and 450 Egg Capacity and Giant Wonders, of 680 and 1000 Egg Capacity. Made in both hot air and hot water styles. The best values upon the market today. Let us prove this to you.

Write for Special Catalogs
Full line of poultry supplies, including Mann Bone Cutters, Keystone Drinking Fountains, Poultry Feeds & Remedies

Bell Phone
Locust 1018
Locust 2057
Keystone Phone
Race 1568



A Rainy Day Job

If it prevents the start of contagious disease among your flock or herd, would be the most profitable day's work of the year. You never can tell when an epidemic may reach your neighborhood. If it isn't disease, the presence of lice, mites and similar parasites will reduce the health of your stock and through the smaller production that follows take part of your profit.



Carbola is a snow white paint in powder form combined with a disinfectant many times stronger than Carbolic Acid. It is neither poisonous nor caustic. Harmless to the smallest chick or stock that licks a painted surface. It is ready to apply with brush or spray pump. It does not blister, flake or peel off. It costs no more than a disinfectant alone. One gallon—ten cents' worth of powder—covers 200 square feet. It is used and endorsed by leading poultry, dairy and breeding farms and agricultural colleges. The dry powder is unexcelled as a lice powder.

Your hardware, seed, paint or drug dealer has Carbola or can get it. If not, order direct shipment by parcel post or express the day order is received. Order today so you will have it on hand when you want it. Satisfaction guaranteed.
10 lbs. (10 gals.) \$1.25 and postage; 20 lbs. (20 gals.) \$2.50 delivered; 50 lbs. (50 gals.) \$5.00 delivered; 200 lb. bags \$15.00. Trial package and booklet 30c postpaid. Add 25% for Texas and Rocky Mountain States.
CARBOLA CHEMICAL COMPANY, Inc.
299 Ely Ave., Dept. W., Long Island City, N. Y.

Mention The Review when writing to Advertisers

IMPROVE YOUR HERD

WHY WASTE WHOLE MILK ON CALVES WHEN

RYDE'S CREAM CALF MEAL

WILL RAISE THEM BETTER AT LESS COST?

Results Guaranteed. Thousands of dairymen, breeders, and farmers have done it, and are doing it now. If they can, so can you! Ryde's Cream Calf Meal is a complete food for young calves. It gives them every feeding element they need for thrifty growth, and gives it to them in the most digestible form.

Saves Milk. Costs Much Less to Feed. Sold in spotted bags that hit the spot with calves.

Ask your dealer for it. If he doesn't carry it, write us and we'll see you get it, either through him or direct from us.

RYDE & COMPANY, Chicago, Ill.



Save Your Calves And Keep Them Healthy



Shortly after a "B-K" treatment, your Calves will show signs of improvement and finally recover their former vigor. Don't let your Calves become weak or die from the Scours or Diarrhoea. You want strong, healthy, lively calves.

Save Every Calf. Scours are caused by germs of infection. B-K kills these germs and heals the irritated and inflamed tissue, restoring healthy action. B-K may be given freely in the milk or water—it is harmless, yet it is very effective.

B-K is handy. You have IN ONE JUG your treatment for Calves, Cows and Bulls, also your disinfectant for general use. No special mixing; saves trouble and costly mistakes; quick, accurate, convenient and successful.

Don't be without B-K—some time you'll want it in a hurry.

Get a gallon—the Standard Farm Package. If your dealer hasn't that size, have him get it for you.

PHILADELPHIA FARMERS AND DAIRYMEN SUPPLY CO., Phila., Pa.

1918 Market St. General Laboratories, Madison, Wis. Sole Mfrs. B-K.



Keep Farm Animals Healthy

—full of life and vigor. International Stock Food Tonic helps them to properly digest and assimilate their food. Keeps their blood pure—helps them to avoid disease. The feed saved more than pays for it.

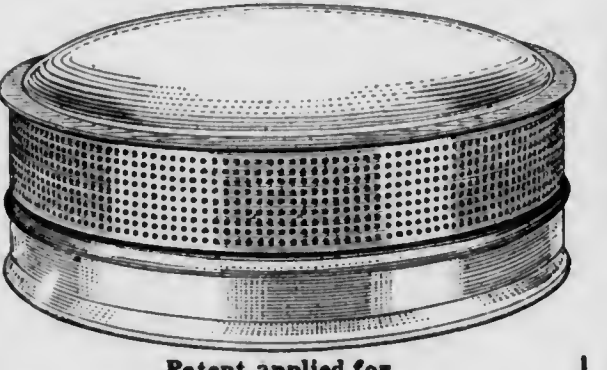
INTERNATIONAL Stock and Veterinary Preparations

—include International Stock Food Tonic, Hog Tonic, Worm Powder, Animal Dip, Pheno (Disinfectant), Colic Medicine, Heave Powder, Distemper Powder, Gall Salve, Poultry Preparations, Silver Pine Healing Oil and many others.

Successful for 30 Years. A steadily increasing demand for over a quarter of a century proves their popularity. There's an International preparation for every farm animal.

Ask Your Dealer

Mention the Review when writing to advertisers



Patent applied for

BARNETT'S New Ventilated Cover

fits over the outside of the can and absolutely protects the milk from insects and dirt of every kind. The screened opening is ample to permit enough circulation and milk is kept in splendid condition.

Made in all needed sizes.

Write for literature, prices and names of dealers who carry covers in stock.

Manufactured exclusively by

BARNETT & VOIGT

Address all correspondence to

G. W. K. VOIGT

708 Finance Bldg, Philadelphia

For Better Dairy Products

—USE—

Monarch Sterilizer

A Powerful Germicide and Disinfectant Absolutely Non-poisonous

Popular Price, \$2.00 per Gallon

Write for Literature

Monarch Laboratories, Inc.

BLOOMFIELD, NEW JERSEY

The annual meeting of the Ayrshire Breeders' Association will be held in Springfield, Mass., Wednesday, June 8th, 1921. On the following day a National Ayrshire sale under the direction of Messrs. A. H. Sagendorph, Stephen Ball, George Stockwell and R. I. Knight, will be held.

OUR UNITED PURPOSE FOR AGRICULTURAL

By MILO D. CAMPBELL

(Continued from page 7)

stock dividends from within, during the last few years. Through several months of 1920 these dividends flowed into new capitalization at the rate of one and a half billions a month. I need not enumerate or call them by name. The 100% stock dividend became popular.

Let no man discount the distress that exists among the rural population of the country today, if he has any care for the future of this republic.

High Cost of Living Wrongfully Laid to the Farmer

There are present remedies for most of these out of joint conditions. Why should the farmer receive a half cent for a potato, for which the hotel charges you twenty-five cents? Why should the provisions for a hotel meal for which the farmer receives ten cents, be sold to the public for two dollars and a half?

Why should the farmer sell his cotton for ten cents a pound and buy it back at two dollars a pound?

If the farmer were to receive \$2.50 per bushel for his wheat instead of \$1.50 it would cost the average citizen six-tenths of a cent more for his meal than now. If the cotton farmer should receive twenty-five cents a pound for his cotton, it would cost me a nickel more for my shirt. But as a matter of fact, every sin, every crime of the profiteer in food and clothing is laid at the door of the farmer.

Farm Losses

Government authorities estimate the loss in corn the past year to the farmer to be three and a quarter billions of dollars; upon cotton, two billions of dollars; wheat, one billion; milk and milk products, six hundred and fifty millions of dollars, and upon wool, hides, meat, etc., more billions.

While measures offering relief to the farmers of the country are being held up in Congress, we found anxious friends of railroads pressing the government for their aid and comfort with ample hearings and consideration and with \$300,000,000 of bounty.

Railroad Freight Rates

While farm prices have been cut in two, freights and passenger fares have leaped upward. In the month of November, the railroad freight charges of the United States amounted to \$497,000,000, as compared to \$303,000,000 for November 1919, an increase of 44%. Mr. Herbert Hoover said before the committee of agriculture a few days ago that the most of this increase was being taken from the farmer. This meant that instead of corresponding decrease of transportation cost to the farmers along with his losses, there is an upward cost of getting his stuff to the market of more than a billion dollars a year.

Is it any wonder that his cows are being driven to the shambles and sold for two to four cents a pound, while the consumer is buying them after they have passed through the curtains of the packing house as choice steaks (at 25 to 30 cents). You are buying unawares from the market canners, cow and bull beef. More than half of all the beef being sold by farmers is that of that grade and has been sold by them to the packers at from two to five cents per pound.

Constitutional Government

Our procedure must not partake of revolution or disorder, it must be such as will preserve the constitution, preserve the right of private property and uphold the standard of but one flag. The farm-

er is assailed from many angles. I think it was Caligula who wished that the whole Roman army had but one neck that he might sever it at a single blow. Our battle front is a long one, but in a just cause we shall win.

The opportunity and the duty that lies before the new administration is that of causing miles and miles of smiles to shine upon seven million homes that are today in the cloudland of American agriculture. If this shall be done prosperity will again find its way into factory and store, labor will find employment at good wages and the wheels will everywhere be found turning.

ENORMOUS QUANTITIES OF OLEOMARGARINE USED IN THE UNITED STATES

(Continued from page 16)

Many other substitutes are offered (and often bought by the farmer) in view of their cheapness—which is nearly always open to question. At all events they lessen the possibilities of the farmer making a decent living.

An especial appeal is made to the producers of dairy products, to stop this unwise practice. Let the substitutes for the consumption of those who produce them. "Let go below", reach up and get on a higher plane—for your own as well as the welfare of the dairy industry.

Feed your children and yourself on good nutritious foods, the kind that you were fed upon, and to which you may attribute, in a large sense, your robustness, your ability to do big things and your ability to earn your bread by the sweat of your brow and be proud of it.

FOOD FORUM

A "Food Forum" was staged for three days last month at the Walton School, Philadelphia, by Miss Helen K. Yerkes, principal, and her able corps of teachers.

When fully 1,000 children and 1,000 patrons of the school heard the "Milk Way The Health Way."

An adaption of the "Milk Fairy Play" to suit children of this school was given by 75 pupils in dainty gowns of bright colors which was an excellent presentation of the need of milk in the diet of every child.

Milk songs written for the occasion by Mrs. Orthung, one of the teachers, were sung by the "Glee Club" and a most attractive set of "Milk Posters" executed by the children decorated the walls of the auditorium.

The Inter-State Dairy Council co-operated in this. Dr. Hannah McK. Lyons each day gave the "Story of Milk" and the newer knowledge of its food value, using slides of the Dairy Council to illustrate her talks.

The nutrition classes in the Philadelphia Public Schools and hospitals, the milk for which is furnished by the Inter-State Dairy Council, have not been in operation long enough to get many figures to quote but it is significant that these children have already gained an average of 3.1 lbs. per month as a result of the feeding and care.

A series of nine talks are being given for the Southwest Branch of the Y. W. C. A. to its Girls Industrial Clubs, in different sections of Philadelphia, by the Inter-State Dairy Council.

Dr. Hannah McK. Lyons and Miss Myrtle L. Barger are telling how a big city gets its milk supply and of the food value of milk.

325 FEMALES

In Our Herd

90 OF THEM DAUGHTERS OF OUR HERD SIRE



Sir Inka Prilla Segis 80914

His sons and daughters were first prize winners and Grand Champions at the West Chester Fair, the Trenton, (N. J.) Fair, and the Delaware State Fair in 1920.

We have for sale several of his sons out of yearly record dams, and they are being offered at \$85, \$100, \$200 and up.

Our 85 yearly record cows and heifers average 753 lbs. butter and 17,525 lbs. milk in a year.

Winterthur Farms

Winterthur, Del.

FEDERAL ACCREDITED HERD

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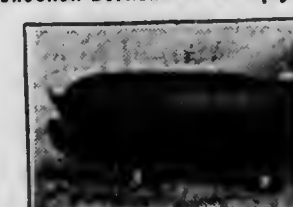
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From Dams with Large Cow Testing Records and from a Sire whose two nearest Dams, as Heifers, averaged 23264 lbs. Milk and 1003 lbs. Butter in 365 Days

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HOLSTEIN FRESIAN CATTLE

Young Stock of either Sex

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Herd Under Federal Inspection

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THE EASTERN GUERNSEY BREEDERS ASSOCIATION

Will hold an

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GUERNSEYS

at Devon, Pa.

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The Sale Committee have accepted a splendid lot of dairy cattle of proven heavy-milking strains, including a number of high-testing Advanced Register cows and the progeny of such.

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Guernsey milk sells on the Philadelphia market for four cents a quart above the regular market prices

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Columbia COW REMEDY. A special scientifically prepared Remedy for diseases of the Cow. Keep them in good condition and increase the flow of milk. Guaranteed to give satisfaction or money refunded. Sent prepaid upon receipt of price, 60c and \$1.20 per package. Salesmen and Agents wanted.

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Cool and aerate milk at one time—halt germ growth—remove odor. GENUINE IMPROVED CHAMPION stops waste and loss—saves its cost in one week. Write for Free Folder. CHAMPION MILK COOLER CO. Dept. 22 Cortland, N. Y.

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"THE COUNTY THAT COUNTS"

Guernseys

May-Rose Breeding

HERD SIRES
LANGWATER HERO
No. 39634

Son of Langwater Heroine, A. R.
record, 16221.1 lbs. milk, 805.64
lbs. fat in Class D.

LANGWATER ROYAL
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Son of Langwater Royal, the sire
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Use a Guernsey bull on your
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**Maple Shade
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**60 Registered
Guernseys**

The cows that give the high priced
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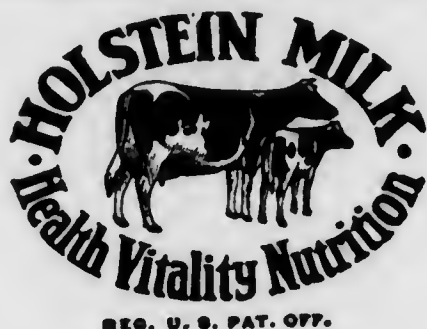
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HERD SIRES

Laverna's Ultra May King
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His four full sisters records
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OFFER a Yearling Bull
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Whose five nearest dams have all
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His sire is a 23-lb. grandson of
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His dam is a 20-lb. daughter of
a 23-lb. cow and is sired by Dutch-
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He is a handsome individual
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See him, see his dam, his sisters
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There is King Segis breeding
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**A Few Choice
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A. R. O. Cows

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Financial Satin Noble

\$100 and Up

80 to Pick From

HIGHLAND FARMS

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Heads the Herd at

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The Greystone herd is one of
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Tie up with the Greystone herd
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Stock of All Ages

**Male and Female
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**Prices and Pedigrees
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Ayrshires

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Tell us your wants and we can
supply them at prices you can
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Aged cows, bred to Glenury, an
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Aged cows, bred to Rena's Baron
of Highland, an outstanding son
of Baron's Best of Bargenoch.

Heifers, bred to these two great
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Young heifers.

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All the above stock carries some
of the best producing blood of the
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**End of
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